WSIS Stocktaking
Success Stories Report 2025

Acknowledgements

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The WSIS Stocktaking would like to acknowledge the tremendous contributions from governments, international organizations, the private sector, civil society, and other stakeholders in providing information on ongoing projects and initiatives to the WSIS Stocktaking Platform. The WSIS Success Stories 2025 report is based on the contributions provided by 19 WSIS Prize winners (19 success stories).

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Introduction

Since its inception in 2012, the WSIS Prizes, and integral part of the WSIS Stocktaking database, have recognized and celebrated outstanding contributions by stakeholders that advance global socio-economic development through information and communication technologies (ICTs). As the World Summit on the Information Society (WSIS) marks its 20th anniversary, this milestone offers a unique opportunity to reflect on the progress made in fostering inclusive and sustainable digital transformation worldwide.

The WSIS Prizes contest, coordinated by the International Telecommunication Union (ITU), is an integral and important part of the WSIS Stocktaking process, which ITU has been mandated to maintain since 2004. With over 2 million subscribers and reaching millions more worldwide, the WSIS Prizes promote best practices and showcase how digital technologies are driving development and making tangible impact across all regions and sectors.

The importance of acknowledging excellence in the implementation of WSIS-related projects is underscored in United Nations Economic and Social Council (ECOSOC) recent Resolutions 2024/13 and 2023/31. These resolutions reaffirm the value of recognizing impactful initiatives aligned with the WSIS Action Lines and call upon all stakeholders to actively participate by submitting their ICT-related projects to the annual WSIS Prizes contest—an integral component of the WSIS Stocktaking process (www.wsis.org/stocktaking) and reiterate the importance of sharing and taking note of best practices that are shared in this report.

The submission phase for the WSIS Prizes 2025 witnessed unprecedented engagement, with a record 973 project submissions received. Of these, 360 exceptional entries advanced to the Nomination Phase, where we received over 2 million votes from the global community. Out of 360 Nominees, 90 Champions were selected, and during the WSIS+20 High-Level Event 2025, which took place on 7-11 July 2025 in Palexpo, Geneva, co-hosted by ITU and Swiss Confederation, co-organized by ITU, UNESCO, UNDP, UNCTAD, the 19 WSIS Prizes 2025 Winners were announced and celebrated.

The *WSIS Stocktaking: Success Stories 2025* publication presents a comprehensive overview of the winning projects from the WSIS Prizes 2025. Each entry is profiled in detail, including the category under which it was awarded, a description of its objectives and activities, and the impact it has had across social, economic, and environmental dimensions. The publication also highlights partnerships, challenges faced, future plans, and how the initiatives contribute to both the WSIS Action Lines and the achievement of the Sustainable Development Goals (SDGs). Reflections from winners on the relevance of the WSIS Stocktaking and Prizes initiative in advancing the SDGs are also featured.

For further information or inquiries regarding the WSIS Prizes contest, please do not hesitate to contact the WSIS team (wsis-prizes@itu.int).

Executive Summary

As we mark the 20th anniversary of the World Summit on the Information Society (WSIS), the WSIS Prizes continue to stand as a cornerstone of global recognition for outstanding efforts in the implementation of WSIS Action Lines.

In line with the WSIS Action Lines, 19 winning ICT for Development (ICT4D) initiatives were selected in 2025 from across the globe to serve as exemplary models of best practices to be replicated by other stakeholders interested in information and communication technologies for development. These initiatives not only illustrate how tangible progress toward the Sustainable Development Goals (SDGs) can be achieved through ICTs, but also serve as a source of inspiration for stakeholders around the world.

The WSIS Prizes contest is open to all stakeholders, governments, the private sector, civil society, academia, and international organizations, under 18 categories aligned with the WSIS Action Lines outlined in the Geneva Plan of Action. The 2025 edition saw a remarkable breadth of engagement, with 360 nominated projects and 90 runner-ups representing a diverse array of contributors. Regionally, this included 40 projects from Asia and the Pacific, 22 from Africa, 12 from Western Europe and North America, 5 from Eastern Europe, and 11 from Latin America and the Caribbean.

Building on the outcomes of the United Nations General Assembly (UNGA) Overall Review of WSIS and aligned with the 2030 Agenda for Sustainable Development, the WSIS Prizes 2024 further reinforces the crucial role of ICTs as enablers of sustainable development. Through the WSIS Stocktaking process, these success stories are documented to highlight the transformative potential of ICT projects in advancing the SDGs and to encourage replication and innovation globally.

These projects showcase how, two decades after the WSIS process was launched, the global community continues to make significant strides in leveraging digital technologies for inclusive and sustainable progress.

Overview of Projects

WSIS Action Line C1. The role of governments and all stakeholders in the promotion of ICTs for development

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Situational-Analytical Complex

Engineering and Technical Center of the President's Affairs Administration of the Republic of Kazakhstan

Republic of Kazakhstan

Basic Information about the Entity

The Engineering and Technical Center of the President's Affairs Administration of the Republic of Kazakhstan (ETC) is a specialized governmental entity based in Astana, dedicated to building a reliable and efficient system of infocommunication services for the country's highest administrative offices. ETC plays a critical role in supporting the digital infrastructure of 108 government agencies and subordinate organizations within the President's Affairs Administration, while also supporting 41 critical information systems.

Guided by a clear internal policy, the ETC emphasizes two core principles:

1. **Professional Staff** – The organization considers its people to be its greatest asset. It actively fosters a culture of innovation, leadership, and professional development, and is committed to attracting and retaining highly qualified and competent specialists.
2. **Quality Control** – Quality is at the heart of ETC's strategic approach. Through a robust quality management system, ETC ensures service excellence at every stage of implementation, reflecting its guiding motto: *"AT THE TOP OF SERVICES!"*

By providing essential digital and technical support to key state bodies, the ETC contributes to the development of a secure, efficient, and future-ready public administration in the Republic of Kazakhstan.

For more information, please visit: https://ito.qr-pib.kz

Project's Description (Activities Description)

The **Situational-Analytical Complex (SAC)** is a flagship GovTech initiative utilized by the Head of the Presidential Administration of the Republic of Kazakhstan to strengthen data-driven decision-making and institutional oversight. The core objective of the project is to integrate diverse information systems operated by subordinate organizations under the President's Affairs Administration,

consolidating a wide range of economic, social, political, crime, and security indicators to facilitate seamless and efficient data exchange.

Leveraging advanced digital technologies, SAC provides executive leadership with real-time, actionable insights, thereby significantly enhancing governance efficiency. Since its implementation, the system has delivered measurable results. Notably, SAC has uncovered illegal practices in parental advocacy and revealed inequities in government employment. Its automated contractor reliability scoring mechanism has also identified numerous conflicts of interest in the public procurement sector, including cases involving familial ties to contracts.

Through its functional components, SAC supports optimal resource utilization and fosters continuous digital innovation within government operations, reinforcing Kazakhstan's broader GovTech transformation agenda.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance.

The **Situational-Analytical Complex (SAC)** significantly contributes to multiple **WSIS Action Lines**, particularly **C1** (the role of public governance authorities in promoting ICT for development), **C7** (ICT applications: e-government), and **C10** (ethical dimensions of the Information Society). By centralizing disparate government information systems and enabling automatic data analysis, SAC enhances the availability of critical information, thereby supporting data-driven public governance and fostering transparency. Its impact is evident in the identification of over 1,100 and publicly disclosed conflict of interest in public procurement related to family ties, clear demonstrations of increased accountability and ethical oversight.

In alignment with the **Sustainable Development Goals (SDGs)**, SAC advances **SDG 9** (Industry, Innovation, and Infrastructure) by modernizing public-sector infrastructure with cutting-edge GovTech solutions. Its advanced network analysis capabilities allow authorities to detect patterns, enforce compliance, and implement anti-corruption measures more consistently. By providing a consolidated and transparent evaluation platform, SAC strengthens institutional responsiveness and trust, core tenets of the 2030 Agenda for Sustainable Development.

Moreover, the project directly supports **Objective 4 of the Global Digital Compact (GDC)** by promoting responsible and interoperable data governance. SAC establishes a secure and integrated digital infrastructure that consolidates data from previously siloed government systems with varying technical standards. One of the project's foundational achievements was the development of common standards, metadata frameworks, and integration protocols, which not only improved institutional data sharing but also laid the groundwork for scaling the platform across regional and municipal levels. This ensures coherence and consistency across the entire public administration ecosystem.

Looking forward, SAC's integration of **AI and predictive analytics** aligns with the GDC's broader goal of governing emerging technologies for the public good. By deploying AI tools to enable real-time risk prediction and policy guidance, the platform showcases how advanced technologies can be used responsibly to strengthen public administration and build societal resilience—further demonstrating Kazakhstan's commitment to ethical and forward-looking digital governance.

Social Economic and Environmental Impact of the Project

The project plays a vital role in supporting the monitoring of public, socio-political, and digital platforms, notably the Digital Family Map and the Digital Labor Risk Map. The Digital Family Map enables comprehensive tracking of various social challenges across Kazakhstan. It covers data on approximately 20 million individuals, including 6.2 million families, allowing government institutions to proactively identify and support vulnerable households. This early detection mechanism facilitates targeted and timely interventions, improving the efficiency and impact of social assistance programs.

Similarly, the Digital Labor Risk Map, introduced in April 2024, is designed to monitor, assess, and prevent labour-related risks across the country. By December 2024, the system had already registered 93,000 businesses. Using a robust scoring model that analyses over 80 indicators from integrated government information systems, the tool evaluates each company's risk profile through a structured, step-by-step assessment. This process allows for the early identification of potential labour issues and enables the government to implement preventive measures, enforce compliance, and protect worker well-being.

By integrating these digital platforms, the SAC significantly enhances the government's capacity to leverage data analytics for informed policymaking, improved oversight, and more responsive public service delivery.

Highlights of the Project's Partnerships Activities

The successful implementation and continuous development of the Situational-Analytical Complex (SAC) have been made possible through strong multi-stakeholder collaboration involving government authorities, technical experts, and analytical institutions. Each partner has played a critical role in shaping the platform and ensuring its effectiveness.

The Administrative Office of the President of the Republic of Kazakhstan and the President's Affairs Administration of the Republic of Kazakhstan have served as the project's principal clients, providing strategic direction and organizational oversight. Their leadership ensured alignment with national priorities, approved key decisions, and facilitated cross-institutional coordination.

The **Engineering and Technical Center (ETC)** served as the lead developer of the SAC, overseeing the design and implementation of system architecture, integration of IT solutions, and the ongoing technical maintenance of the platform.

Additionally, various government ministries and agencies contributed essential data and participated in systems integration. Notable contributors include platforms such as the Unified Personnel Service information system and Smart Data Ukimet, which provided vital administrative and operational data. Furthermore, national statistics and analytics centers played a key role in verifying and enriching the data ecosystem, ensuring the reliability and timeliness of the indicators used across the system.

These collaborative efforts have created a robust and interoperable digital infrastructure, reinforcing the SAC's role as a cornerstone of data-driven governance in Kazakhstan.

Challenges and Projects Future Perspectives

The initial development and implementation of the Situational-Analytical Complex (SAC) faced several significant challenges. One of the primary obstacles was the varying levels of digital maturity among government bodies. Many institutions continued to rely on non-standardized formats such as Excel spreadsheets, Word documents, or even paper-based records, which posed difficulties in achieving

seamless data integration. Additionally, the lack of system interoperability hindered the rapid creation of a unified analytical platform capable of delivering a comprehensive, real-time view across sectors.

Cybersecurity also emerged as a critical concern. Consolidating sensitive, high-level state data within a single system necessitated robust information security measures. As a result, data integrity, privacy protection, and long-term system resilience became core design principles during the platform's development.

Despite these early barriers, the SAC holds significant promise for expansion and innovation. A key area of future development involves the integration of artificial intelligence and predictive analytics. By employing advanced machine learning algorithms, the platform aims to identify emerging social and economic trends, forecast potential risks, and deliver real-time, data-driven recommendations to support more informed policy decisions.

Another major strategic objective is the regional scaling of the SAC. Expanding the platform to reach subnational levels—including regional and district administrations—will empower local governance with timely, evidence-based insights, enhancing public service delivery and decision-making across all tiers of government.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms serve as essential enablers of international development by offering a unique global space for stakeholders across governments, civil society, academia, and the private sector to share, learn from, and connect around digital transformation efforts. These platforms go beyond recognition—they facilitate knowledge exchange, foster strategic partnerships, and encourage policy mobility across borders and sectors.

From the perspective of sustainable development, WSIS Stocktaking plays a vital role in showcasing ICT-related initiatives that contribute directly to the achievement of the Sustainable Development Goals (SDGs). As a living repository, the platform highlights best practices, tracks global progress, and identifies areas requiring greater attention or support. It offers a valuable entry point for practitioners, policymakers, and researchers alike to access concrete examples of effective digital development.

The WSIS Prizes, in particular, help elevate impactful initiatives that might otherwise remain underrepresented—especially those from emerging regions or niche sectors. For many smaller or early-stage projects, international recognition through WSIS often leads to increased visibility, new partnerships, funding opportunities, and enhanced institutional support. By validating local innovations and presenting scalable solutions, the WSIS Prizes help cultivate a broader community committed to inclusive and sustainable ICT development.

Far more than ceremonial accolades, the WSIS Stocktaking and Prizes platforms act as strategic catalysts—promoting global dialogue, peer learning, and digital solidarity. They reaffirm the importance of collaboration and shared responsibility in building a connected and equitable information society.

WSIS Action Line C2. Information and communication infrastructure

"Internet para Todos" in Peru

Telefónica del Perú

Peru

Basic Information about the Entity

Internet Para Todos (IPT) is a Peruvian organization headquartered in Lima and operating nationwide, with a mission to close the digital divide by delivering sustainable, inclusive, and high-quality mobile internet connectivity to unconnected rural communities across the country. By expanding access to digital infrastructure, IPT aims to promote social and economic inclusion for underserved populations. More information is available on their official website: www.ipt.pe.

Project's Description (Activities Description)

Internet Para Todos (IPT) is a groundbreaking initiative launched in 2019 through a strategic global partnership between Telefónica, Meta, BID Invest, and CAF. The project was created in response to the persistent digital divide affecting Peru's rural population, with the mission of delivering sustainable, inclusive, and high-quality mobile internet connectivity to some of the country's most isolated and underserved communities. Operating under the Rural Mobile Infrastructure Operator (OIMR) framework, IPT introduces an innovative, cost-effective, and collaborative model for rural network deployment.

At the heart of IPT's strategy is the deployment of 4G mobile infrastructure in remote and geographically complex areas where traditional operators have limited presence due to economic and logistical constraints. A key innovation of the project is its shared infrastructure model, known as Radio Access Network (RAN) sharing, which allows multiple mobile network operators to use the same physical infrastructure. This approach significantly reduces costs, increases operational efficiency, and enables broader coverage in areas that were previously unconnected.

To ensure sustainability, IPT incorporates renewable energy solutions, such as solar-powered base stations, to provide reliable connectivity in off-grid areas where access to electricity is limited or unavailable. Beyond infrastructure, the project places strong emphasis on community engagement and digital empowerment. Through targeted digital literacy initiatives like *Escuelita IPT* and *Aprende con IPT*, the project promotes digital inclusion by teaching individuals and communities how to effectively use internet services for education, healthcare, entrepreneurship, and civic participation.

The ultimate goal of IPT is to connect over 6 million Peruvians living in rural and remote regions, creating pathways to education, health services, economic opportunity, and social inclusion. As of 2025, IPT has successfully deployed more than 2,600 4G sites, extending mobile internet access to over 19,000 rural localities and directly benefiting nearly 4 million people. This effort represents one

of the most significant national-scale connectivity programs in Latin America, offering a scalable model for other countries facing similar rural connectivity challenges.

By combining technological innovation, inclusive partnerships, and a strong focus on human development, Internet Para Todos demonstrates how public-private collaboration can accelerate progress toward universal connectivity and sustainable development.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

Internet Para Todos (IPT) demonstrates strong alignment with several **WSIS Action Lines**, particularly **C2 (Information and Communication Infrastructure)**, **C4 (Capacity Building)**, and **C7 (ICT Applications – eHealth, eLearning, eBusiness)**. By expanding 4G infrastructure in Peru's most remote areas, IPT directly advances **WSIS Action Line C2**, promoting equitable access to essential digital infrastructure. Its digital literacy programs and local community engagement initiatives contribute to **Action Line C4**, helping build the capacity of rural populations to effectively use ICTs. Through the provision of connectivity that enables access to digital education, telemedicine, and online business tools, IPT supports **Action Line C7**, fostering real-world applications of ICT for development.

In terms of the **Sustainable Development Goals**, IPT contributes to **SDG 9 (Industry, Innovation, and Infrastructure)** through the deployment of an innovative, shared telecom infrastructure model in high-complexity rural zones. It supports **SDG 10 (Reduced Inequalities)** by bridging the digital divide for marginalized and geographically isolated communities. Through initiatives such as school connectivity and digital learning platforms, IPT helps realize **SDG 4 (Quality Education)**, while projects like *Tejedoras de Parco Alto* empower women with digital tools, advancing **SDG 5 (Gender Equality)**. Furthermore, the initiative exemplifies **SDG 17 (Partnerships for the Goals)** through its collaborative model involving public and private stakeholders including Telefónica, Meta, BID Invest, and CAF.

IPT also aligns closely with the principles of the Global Digital Compact (GDC). It promotes universal, affordable connectivity in underserved regions and supports an inclusive digital transformation that prioritizes vulnerable communities. The project adopts open, human-centric technologies, such as Open RAN, and actively fosters multi-stakeholder cooperation to scale connectivity sustainably and responsibly. By addressing both infrastructure and inclusion, IPT sets a replicable example of how digital innovation can be leveraged to achieve equitable and sustainable development on a national scale.

Social Economic and Environmental Impact of the Project

The **Internet Para Todos (IPT)** initiative has generated a wide range of social, economic, cultural, and environmental impacts, contributing meaningfully to inclusive development in Peru's rural and underserved communities. Socially, the project has expanded access to essential services such as education, healthcare, and civic participation, enabling residents in remote areas to benefit from digital learning tools, telemedicine, and platforms for community engagement. Economically, IPT has empowered local entrepreneurs by providing the infrastructure necessary for e-commerce and digital enterprise, thus creating new opportunities for income generation and economic inclusion. Culturally, the initiative has played a role in preserving and promoting local identities by enabling digital storytelling, access to indigenous content, and greater connectivity to the wider world. From an environmental perspective, IPT demonstrates a commitment to sustainability through the

deployment of over 400 solar-powered sites, significantly reducing carbon emissions and promoting the use of green ICT solutions.

As of 2025, IPT has achieved measurable outcomes including the connection of 3.87 million people, coverage of over 16,000 rural localities, and notable improvements in school connectivity and access to telemedicine services. These results underscore IPT's transformative impact across multiple dimensions, reinforcing the importance of digital inclusion as a driver of equitable and sustainable development.

Highlights of the Project's Partnerships Activities

The successful implementation of the **Situational-Analytical Complex (SAC)** has been made possible through strong, coordinated partnerships among government entities, technical developers, and analytical institutions. At the core of this collaboration are the Administrative Office of the President of the Republic of Kazakhstan and the President's Affairs Administration, which have acted as primary clients and strategic coordinators. These institutions provided critical organizational oversight, approved project directions, and ensured alignment with national development priorities. The Engineering and Technical Center (ETC) served as the lead technical partner, responsible for the design and implementation of the system's architecture, integration of IT solutions, and ongoing operational support. Additional support was provided by various government ministries and agencies, which contributed key datasets and actively participated in system integration processes—such as the Unified Personnel Service and Smart Data Ukimet. Furthermore, national statistics and analytics centers played a vital role in validating and updating the system's information base, ensuring the reliability and accuracy of the indicators used. This multi-stakeholder cooperation has been central to the platform's development and continuous improvement, reflecting a shared commitment to leveraging GovTech for enhanced public sector performance.

Challenges and Projects Future Perspectives

The development of the **Situational-Analytical Complex (SAC)** faced several key challenges during its initial implementation phase. One of the most significant barriers was the low digital maturity of many government bodies, which often relied on outdated and non-standardized data formats such as Excel spreadsheets, Word documents, or even paper-based records. This lack of interoperability made it difficult to consolidate information across institutions and delayed the creation of a unified, real-time analytical platform. Additionally, the integration of sensitive, state-level data introduced pressing concerns related to cybersecurity, necessitating a strong framework for data privacy, protection, and system resilience. These considerations were central to the platform's architecture and guided the adoption of robust information security protocols.

Looking ahead, SAC has a promising future as a scalable, intelligent governance tool. One major objective is the integration of artificial intelligence and predictive analytics to identify emerging social and economic trends, assess risks, and generate real-time insights for more effective policymaking. Furthermore, the project envisions expanding its reach to regional and district-level administrations, enabling evidence-based decision-making at all levels of government. This next phase will significantly enhance local governance and promote more responsive, data-driven public services, reinforcing SAC's role as a model of innovative digital governance in Kazakhstan and beyond.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms play a vital role in advancing international development, serving as inclusive and collaborative mechanisms for showcasing innovative ICT solutions from around the world. By offering a global stage for governments, civil society, academia, and the private sector, these platforms promote knowledge-sharing, cross-sector collaboration, and the dissemination of best practices in digital transformation. From a development perspective, WSIS Stocktaking functions as a living repository of progress toward the Sustainable Development Goals (SDGs), enabling stakeholders to identify impactful initiatives, monitor trends, and address persistent gaps. The WSIS Prizes, in particular, enhance the visibility of high-impact and often underrepresented projects, offering them international recognition and credibility. This distinction often catalyzes further investment, new partnerships, and stronger political support. By validating grassroots innovation and scalable local solutions, the Prizes inspire others and reinforce the global momentum toward inclusive, people-centered ICT development. Far beyond recognition, WSIS Stocktaking and the Prizes represent strategic platforms for global dialogue, peer learning, and digital solidarity, driving forward the vision of a more connected, equitable, and resilient information society.

WSIS Action Line C3. Access to knowledge and information

Digital Awareness Programme

Nigerian Communications Commission

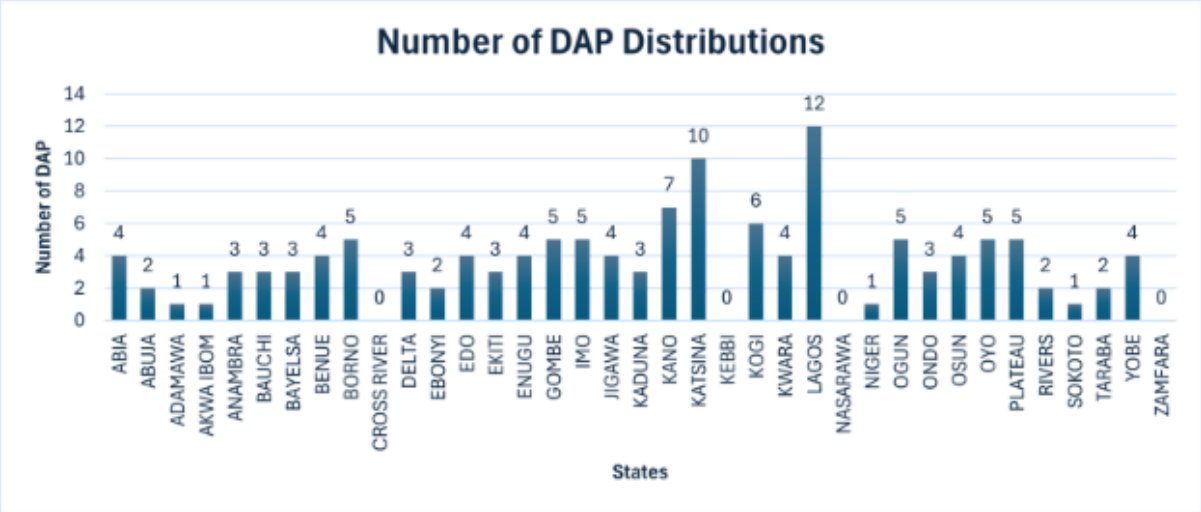
Federal Republic of Nigeria

Basic Information about the Entity

The **Nigerian Communications Commission (NCC)** is the national regulatory authority for the telecommunications industry in Nigeria. Headquartered in Abuja, the Commission plays a vital role in shaping the country's digital future by fostering a market-driven communications sector that encourages innovation, investment, and competition. A core aspect of NCC's mission is to promote universal access to reliable and affordable communications services, ensuring that the benefits of the digital economy reach all segments of the population, including underserved and rural communities. Through its strategic initiatives, policy frameworks, and regulatory oversight, the NCC works to create an enabling environment for ICT growth while safeguarding the interests of consumers and stakeholders. More information about the Commission's work can be found on its official website: https://ncc.gov.ng.

Project's Description (Activities Description)

The **Digital Awareness Programme (DAP)**, an initiative of the Nigerian Communications Commission (NCC), is a strategic project aimed at bridging the digital knowledge gap among Nigeria's rapidly growing youth population. Launched in 2015, the programme focuses on equipping secondary schools across Nigeria—particularly in unserved and underserved communities—with modern ICT infrastructure to promote digital literacy and support academic excellence. The project involves the construction of a fully equipped computer laboratory measuring 8m x 10m, complete with 20 desktop computers, a server, printer, scanner, air conditioning units, a power generator, and a dedicated internet connection via VSAT technology, including a one-year bandwidth subscription. A Local Area Network (LAN) is installed to ensure seamless connectivity within the lab. To date, 260 schools across all six geopolitical zones of Nigeria have benefitted from this initiative, enhancing access to internet-based teaching, learning, research, and development. By targeting secondary school students, the DAP empowers the next generation with the skills and tools needed to thrive in the digital economy, aligning with national goals for inclusive education and ICT development.



Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The **Digital Awareness Programme (DAP)** significantly contributes to multiple WSIS Action Lines by addressing the persistent digital information knowledge gap in Nigeria's rural, unserved, and underserved secondary schools. By providing reliable internet access and ICT infrastructure, DAP promotes **WSIS Action Line C3 (Access to Information)**, enabling students and educators in remote areas to engage in teaching, learning, research, and digital development. It fosters **WSIS Action Line C4 (Capacity Building)** by equipping beneficiaries with essential digital skills, thus enhancing ICT literacy and confidence among Nigeria's youth. Furthermore, the programme advances **WSIS Action Line C5 (Building Confidence and Security in the Use of ICTs)** by ensuring a secure, trusted environment for digital activities such as online registrations for mandatory national examinations, fostering ethical online behavior and responsible use of technology. DAP's contribution to Sustainable Development Goals is multi-faceted: it strengthens **SDG 4 (Quality Education)** through increased school connectivity and digital learning platforms, enabling students in remote communities to access educational resources on par with their urban peers. It drives progress on **SDG 9 (Industry, Innovation, and Infrastructure)** by deploying innovative telecom infrastructure in underserved areas, bridging infrastructural gaps that limit socio-economic development. The initiative also supports **SDG 10 (Reduced Inequalities)** by enabling digital inclusion for marginalized communities, empowering them with tools to overcome geographic and socio-economic barriers. Through strong partnerships among government bodies, educational institutions, and private sector stakeholders, DAP embodies **SDG 17 (Partnerships for the Goals)**, ensuring collaborative efforts that maximize impact and sustainability.

Aligned with the Global Digital Compact (GDC) objectives, DAP is instrumental in **Objective 1: Closing the Digital Divide**, as it directly tackles information accessibility challenges faced by Nigeria's youthful population, particularly in rural areas. It fulfills **Objective 2: Expanding Inclusion** by extending internet connectivity and digital literacy programs to 260 schools across Nigeria's six geopolitical zones, ensuring no community is left behind. Under **Objective 3: Fostering Safe Digital Spaces**, the project promotes secure and responsible ICT usage, educating students on digital ethics, privacy, and data protection, while facilitating critical online services such as national examination registration in safe, monitored environments. The programme supports **Objective 4: Advancing Responsible, Interoperable Data Governance** by nurturing responsible digital citizenship and encouraging adherence to data privacy and ethical standards. Lastly, it contributes to **Objective 5: Enhancing**

International Governance for Artificial Intelligence by emphasizing ethical AI use and international cooperation, ensuring Nigeria's digital transformation aligns with global best practices for fairness, transparency, and sustainability. Through these comprehensive efforts, DAP not only empowers individual learners and communities but also reinforces Nigeria's broader commitment to inclusive, secure, and sustainable digital development in line with international frameworks.

Social Economic and Environmental Impact of the Project

The **Digital Awareness Programme (DAP)** has made a significant social, economic, and environmental impact across Nigeria. Socially, it has enhanced inclusion and accessibility by connecting rural and underserved communities to global educational systems, promoting greater social equity nationwide. By providing internet access and ICT resources to secondary schools, the programme supports the Federal Government's objective of deepening internet and broadband penetration, while simultaneously improving digital literacy and skills among Nigeria's youth. Economically, the increased connectivity and digital capacity empower students with the tools needed to participate in the digital economy, fostering future entrepreneurship and innovation. Furthermore, DAP creates rigorous awareness of the practical usage and application of Information and Communication Technology, helping to bridge the digital divide and build a foundation for sustainable development. Although the project's primary focus is social and educational, its environmentally conscious deployment—such as the use of energy-efficient technologies—contributes to responsible resource use in ICT infrastructure expansion. Measurable results include the successful connectivity of 260 schools across Nigeria's six geopolitical zones, driving forward nationwide digital inclusion and capacity building.

Highlights of the Project's Partnerships Activities

The successful implementation of the **Digital Awareness Programme (DAP)** is made possible through strong partnerships with a diverse range of key stakeholders. Central to this collaboration are the Federal Ministry of Communication Innovation and Digital Economy and the Federal Ministry of Education, which provide strategic guidance, policy support, and coordination to align the initiative with national development goals. Internet Service Providers play a critical role by delivering the necessary connectivity infrastructure to schools, while State Governments facilitate local engagement and ensure smooth project rollout within their jurisdictions. Equipment manufacturers supply the essential hardware needed to establish functional computer labs, and ICT instructors provide the training and capacity-building necessary to empower students and teachers alike. Additionally, parents, caregivers, teachers, and students are actively involved as beneficiaries and champions of the program, fostering community ownership and sustained impact. This multi-stakeholder partnership framework ensures that DAP remains responsive, effective, and inclusive in bridging Nigeria's digital divide.

Challenges and Projects Future Perspectives

The **Digital Awareness Programme (DAP)** has encountered several notable challenges that have impacted its implementation. One of the primary barriers is digital illiteracy, especially prevalent in rural and underserved communities, which limits the effective utilization of ICT resources. Insecurity in certain regions further complicates the deployment and maintenance of infrastructure, posing risks to both equipment and personnel. Additionally, the unreliable power supply in many areas necessitates exploring alternative energy solutions to ensure continuous operation of the digital laboratories. Another significant challenge is the inadequate bandwidth supply, which affects the

quality and consistency of internet connectivity essential for learning and online activities. Moreover, there has been insufficient capacity building for teachers in these rural settings, limiting their ability to effectively integrate ICT into teaching. Finally, ongoing funding constraints have made it difficult to maintain and sustain the digital labs, threatening the longevity of the programme.

Looking ahead, the DAP has outlined clear ambitions to overcome these challenges and scale its impact. A key focus is expanding collaboration with current and new partners to increase both technical and financial support, fostering greater ownership and sustainability of the project. The programme plans to partner with Original Equipment Manufacturers (OEMs) to provide ICT devices at subsidized costs, making technology more accessible. Additionally, the initiative aims to negotiate with Internet Service Providers (ISPs) for reduced rates on bandwidth subscriptions, lowering operational costs. There is also a strategic plan to involve school alumni associations and Parents Teachers Associations (PTAs) to assist with funding the ongoing bandwidth expenses. These collaborative efforts will be critical to enhancing the reach, effectiveness, and sustainability of the Digital Awareness Programme across Nigeria's underserved communities.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms play a crucial role in advancing international development by showcasing successful initiatives that leverage ICTs to drive social and economic progress. These platforms provide invaluable opportunities for networking among a diverse range of stakeholders—including governments, civil society, academia, and the private sector—facilitating knowledge sharing, collaboration, and the exchange of best practices. By enhancing the visibility of innovative projects, WSIS encourages the replication and scaling of proven solutions in various contexts worldwide. This recognition not only validates the efforts of project implementers but also inspires further investment, partnership, and policy support, contributing significantly to global digital inclusion and sustainable development.

WSIS Action Line C4. Capacity building

National Information Dissemination Centre

Malaysian Communications and Multimedia Commission

Malaysia

Basic Information about the Entity

The **Malaysian Communications and Multimedia Commission (MCMC)**, headquartered in Cyberjaya, Selangor, Malaysia, serves as the regulatory body overseeing the communications and multimedia industry in Malaysia. Established under the Malaysian Communications and Multimedia Commission Act 1998, MCMC is tasked with implementing and promoting national policy objectives for the sector, including the development of robust digital infrastructure, the protection of consumer rights, and the fostering of innovation and competitiveness. Through strategic regulatory frameworks and initiatives, MCMC supports Malaysia's digital transformation and plays a pivotal role in enhancing connectivity, digital literacy, and equitable access to communications services across the country. More information is available at www.mcmc.gov.my.

Project's Description (Activities Description)

The **National Information Dissemination Centre (NADI)** is a flagship initiative by the **Malaysian Communications and Multimedia Commission (MCMC)**, designed to bridge the digital divide and promote inclusive digital participation across Malaysia. Established to serve underserved and rural communities, NADI functions as a nationwide network of one-stop digital access centres offering internet connectivity, digital skills training, and essential e-services. The initiative supports Malaysia's national digital transformation agenda by ensuring equitable access to digital resources, fostering empowerment, and enhancing socio-economic opportunities for all Malaysians regardless of geography or background.

As of March 2025, the NADI programme has registered over 1.93 million members and operates 1,099 centres nationwide, with significant outreach in remote regions such as Sarawak, Sabah, and Pahang. Through its Smart Services platform, NADI enables users to access e-government services, participate in entrepreneurship programmes, and benefit from lifelong learning opportunities. Its programming spans five key development pillars: Entrepreneurship, Lifelong Learning, Personal Well-being, Awareness, and Government Initiatives. Signature programmes such as EmpowerHer, eKelas, the Safe Internet Campaign, and MADANI Community have particularly focused on digital inclusion for women, youth, and micro-entrepreneurs.

A powerful example of NADI's impact is visible in Pulau Banggi, a remote island in Sabah, where the initiative has extended high-speed broadband access and ICT training as part of the JENDELA broadband expansion and satellite technology integration efforts. The Pulau Banggi ICT Infrastructure & Digital Inclusion Project exemplifies Malaysia's commitment to ensuring that access to digital tools

and information is treated as a fundamental right. It not only improves connectivity but embeds digital solutions into the fabric of community life—spanning education, entrepreneurship, and cultural heritage.

Together, NADI and Smart Services demonstrate MCMC's strategic role in advancing digital equity, supporting Malaysia's ambition to build a connected, inclusive, and knowledge-driven society, where no one is left behind.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The **National Information Dissemination Centre (NADI)** initiative demonstrates strong alignment with several **WSIS Action Lines** and **Sustainable Development Goals (SDGs)** by fostering inclusive digital participation and strengthening community resilience through ICT. Primarily, the project supports **WSIS Action Line C4 (Capacity Building)** by offering targeted digital literacy training, entrepreneurship development, and access to ICT tools, especially in rural and remote communities. Additionally, it aligns with **WSIS Action Line C2 (ICT Infrastructure)** through the expansion of broadband access and establishment of community digital centres, as well as **C7 (ICT Applications)** in areas such as e-health, e-learning, and e-business.

In terms of SDGs, the project directly contributes to **SDG 3 (Good Health and Well-being)** by facilitating digital access to healthcare resources, particularly in hard-to-reach areas. It also advances **SDG 4 (Quality Education)** by promoting inclusive, technology-enabled learning platforms such as *eKelas*. Through digital upskilling and entrepreneurship support, the initiative contributes to **SDG 8 (Decent Work and Economic Growth)**, while the deployment of ICT infrastructure and community-driven innovation aligns with **SDG 9 (Industry, Innovation, and Infrastructure)**. Most significantly, NADI tackles **SDG 10 (Reduced Inequalities)** by bringing equal digital opportunities to underserved and geographically isolated populations.

In support of the **Global Digital Compact (GDC)**, NADI addresses **Objective 1: Closing the Digital Divide**, by connecting unserved communities and delivering reliable, high-speed internet. It also promotes **Objective 2: Expanding Inclusion**, by ensuring equitable access to digital tools and knowledge, with special attention to women, youth, and marginalized groups. These actions reflect the GDC's emphasis on inclusive, human-centric, and rights-based digital development, showing how community-driven digital infrastructure can scale to national impact while upholding global digital equity principles.

Highlights of the Project's Partnerships Activities

The **National Information Dissemination Centre (NADI)** in Malaysia thrives through dynamic and inclusive multi-stakeholder partnerships that bridge government, private sector, and community networks. At the national level, strategic collaboration between MCMC and telecommunications provider Maxis has enabled the introduction of advanced AI tools, including ChatGPT, into NADI centres—enhancing digital education and interactive learning. Meanwhile, joint initiatives with the Department of Information (JaPen) have expanded digital literacy and civic outreach across Malaysia's Madani communities, helping citizens engage with government services more effectively.

In Sarawak, NADI has formed impactful alliances with organizations such as the Companies Commission of Malaysia (SSM), Amanah Ikhtiar Malaysia (AIM), TEKUN Nasional, and e-commerce

platform Shopee, supporting hundreds of rural and small-scale entrepreneurs. These collaborations have enabled local businesses to grow and tap into global markets, fostering digital entrepreneurship and financial inclusion.

Together, these partnerships position NADI as a comprehensive digital empowerment hub, reinforcing its mission to deliver inclusive access to technology, strengthen community capacity, and support Malaysia's broader digital transformation goals.

Challenges and Projects Future Perspectives

The **National Information Dissemination Centre (NADI)** initiative continues to face several key challenges in its mission to bridge Malaysia's digital divide. These include persistent connectivity gaps in remote and geographically isolated areas, as well as a digital literacy divide that limits participation from marginalized and underserved populations. In addition, resource limitations—including funding for the latest digital tools and ongoing training for staff—hinder the ability to maintain consistency and innovation across the network. Retaining skilled personnel in rural areas and sustaining community engagement across more than 1,000 centres also remains a significant hurdle.

Despite these challenges, NADI has set ambitious future goals. The programme aims to extend access to approximately 4.7 million Malaysians within a 1km radius of NADI centres. It also targets a direct impact on 750,000 individuals through structured training and digital capacity-building programmes across all 1,099 centres nationwide. These forward-looking efforts align with Malaysia's broader digital transformation vision and reinforce NADI's role as a cornerstone of inclusive, community-led digital empowerment.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

Malaysia's active involvement in the WSIS process underscores its dedication to leveraging ICTs for sustainable development. Projects like **NADI** (National Digital Inclusion) exemplify the country's commitment to community-driven solutions that effectively bridge the digital divide and support the broader 2030 Agenda for Sustainable Development. By incorporating NADI into the WSIS Stocktaking and WSIS Prizes, Malaysia not only showcases its impactful initiatives but also shares valuable insights and best practices with the global community. This collaboration helps avoid duplication of efforts, optimize resources, and foster partnerships that accelerate progress towards achieving the Sustainable Development Goals (SDGs). Through platforms like WSIS, Malaysia reinforces its role in global digital solidarity and the inclusive digital transformation of society.

WSIS Action Line C5. Building confidence and security in the use of ICTs

Anti Online Scam Operation Center

Ministry of Digital Economy and Society

Thailand

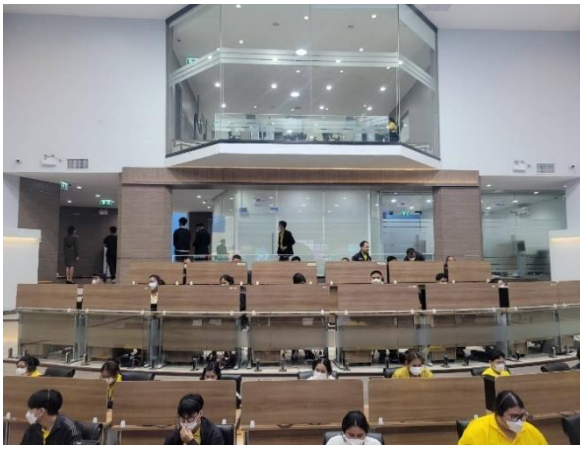
Basic Information about the Entity

The **Ministry of Digital Economy and Society (MDES)** of Thailand, headquartered at 120 Chaeng Wattana Road, Building C, Thung Song Hong, Laksi, Bangkok, plays a pivotal role in steering the country's digital transformation in alignment with the Thailand 4.0 vision. The ministry is dedicated to formulating and advocating for national digital policies and legal frameworks that foster sustainable digital economic growth and social development across the nation. Central to its mandate is the development and maintenance of essential digital infrastructure, ensuring that it remains reliable, secure, and accessible to all sectors of society. MDES actively promotes the widespread adoption of digital technologies and innovation while emphasizing the importance of building a skilled digital workforce to boost Thailand's competitiveness in the global economy.

Additionally, the ministry works to enhance the efficiency and effectiveness of government services by driving digital transformation and facilitating seamless integration between government agencies. It also oversees the management of national statistical systems to underpin evidence-based policymaking and strategic planning. To safeguard public trust in the digital environment, MDES continuously monitors and evaluates ongoing digital initiatives, focusing on safety, privacy, and sustainability. Through these comprehensive efforts, the ministry aims to create an inclusive, innovative, and resilient digital society that improves the quality of life for all Thai citizens. Further information about its programs and initiatives can be found on the official website at http://mdes.go.th.

Project's Description (Activities Description)

The **Anti-Online Scam Operation Center (AOC)** is a dedicated, round-the-clock service established under Thailand's Ministry of Digital Economy and Society with the primary objective of combating online scams and financial cybercrime. Functioning as a centralized hub, the AOC facilitates the prompt reporting of online fraud through accessible channels such as the 1441 hotline and the official website www.thaipoliceonline.go.th, ensuring victims have a reliable and efficient platform to seek help. Leveraging advanced artificial intelligence technology, the center is equipped to detect fraudulent activities in real time and track suspicious financial transactions swiftly, enabling immediate intervention such as the freezing of mule accounts to prevent further financial losses for victims.




Figures 1 & 2. The AOC Operation Center provides 24/7 service with 100 hotline lines to support victims of online scams.

The project's design incorporates strong inter-agency collaboration involving key national bodies including the Royal Thai Police, the Anti-Money Laundering Office (AMLO), the Bank of Thailand (BOT), the National Broadcasting and Telecommunication Commission (NBTC), and the Securities and Exchange Commission (SEC). This multi-stakeholder coordination strengthens the operational capacity to respond effectively to online financial crimes, ensuring a cohesive and integrated approach to law enforcement efforts. Furthermore, public education is a cornerstone of the AOC's strategy, exemplified by awareness campaigns like "Cyber Vaccine," which aim to enhance digital literacy and empower the public with knowledge and preventative measures to safeguard against scams.

Figures 3 & 4. Dr. Ekapong Limcharone, Head of the AOC, presents the online scam situation and raises public awareness.

The initiative is firmly grounded in robust legal frameworks provided by the Royal Decree on Measures for the Prevention and Suppression of Technology Crimes B.E. 2566 (2023) and its updated version B.E. 2568 (2025). These legal instruments empower the AOC with the authority to monitor, track, freeze assets, and prosecute perpetrators of online financial crimes efficiently. The project's goals focus on delivering tangible benefits to victims, including immediate freezing of fraudulent accounts, end-to-end case tracking that allows victims to monitor their cases' progress and receive continuous support, expedited recovery of stolen funds through partnerships with financial institutions, and improved law enforcement outcomes such as quicker arrests and more comprehensive investigations targeting broader scam networks.

The Anti-Online Scam Operation Center's reach extends to diverse beneficiaries: the general public, especially digital consumers and small and medium-sized enterprises (SMEs), who are often vulnerable to cyber threats; marginalized and at-risk groups; and law enforcement agencies that gain from enhanced technological tools and improved inter-agency collaboration. By integrating cutting-edge technology, sound legal authority, and a strong public engagement framework, the AOC strives to foster long-term resilience against online scams, ultimately strengthening public confidence and trust in Thailand's digital economy and online systems. This comprehensive approach not only addresses immediate cybercrime threats but also positions Thailand as a leader in building secure, trusted, and sustainable digital environments.

Figures 5 & 6. Statistics reported to AOC include call volume, number of frozen mule accounts, types of scams, total financial losses, and other key indicators related to online scam operations.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The **Anti-Online Scam Operation Center (AOC)** exemplifies the core principles of the World Summit on the Information Society (WSIS) by promoting trust, security, and equitable digital access. It closely aligns with **WSIS Action Line C5**: Building Confidence and Security in the Use of ICTs, through its comprehensive efforts in detecting online fraud, suspending mule accounts, and minimizing financial losses to victims. AOC's early adoption of advanced artificial intelligence technologies for fraud detection and real-time tracking of suspicious financial activities demonstrates a forward-looking approach to strengthening Thailand's cybersecurity framework, fostering resilience against evolving digital threats.

In addition, the AOC supports **WSIS Action Line C3**: Access to Information and Knowledge by providing easily accessible reporting channels such as the 1441 hotline and the official portal www.thaipoliceonline.go.th. These platforms enable swift and efficient reporting of cybercrime, particularly benefiting vulnerable groups and reducing barriers to justice. By enhancing public confidence in digital platforms and ensuring transparency, the AOC significantly contributes to a safer online environment where users feel protected and empowered.

The center also embodies **WSIS Action Line C11**: International and Regional Cooperation, actively participating in knowledge sharing and policy collaboration at both regional and global levels. Thailand's instrumental role in establishing the ASEAN Working Group on Anti-Online Scams highlights its leadership in fostering regional partnerships focused on policy alignment, data exchange, and coordinated enforcement actions. Moreover, the AOC collaborates with international entities such as the Organization for Security and Co-operation in Europe (OSCE), reinforcing global solidarity in combating online scams and cybercrime.

From the perspective of the **Sustainable Development Goals (SDGs)**, the AOC makes significant contributions to several targets. It advances **SDG 9** (Industry, Innovation, and Infrastructure) by integrating cutting-edge technologies to enhance digital infrastructure and fraud prevention capabilities. The center supports **SDG 16** (Peace, Justice, and Strong Institutions) through its efforts to reduce cyber-enabled financial crimes and bolster institutional accountability and transparency. By safeguarding the digital economy, it promotes **SDG 8** (Decent Work and Economic Growth), enabling businesses to innovate and operate securely. Furthermore, **SDG 17** (Partnerships for the Goals) is reinforced by AOC's active engagement in regional cooperation and knowledge sharing with ASEAN and other international partners.

Aligned with the **Global Digital Compact (GDC)**, the AOC directly supports **Objective 3**: Fostering a Safe Digital Space, through its integration of AI-driven fraud detection, real-time case monitoring, and coordinated law enforcement responses. These capabilities enhance digital trust, reduce vulnerabilities, and build a more resilient cybersecurity environment. The center also contributes to **Objective 4**: Advancing Responsible, Interoperable Data Governance by functioning as a national hub for scam data analysis, facilitating secure and interoperable access to digital services for victims and authorities alike. Moreover, by developing and deploying AI tools for fraud detection and digital forensics, the AOC addresses **Objective 5**: Enhancing International Governance of Artificial Intelligence, laying the groundwork for more intelligent, collaborative cybercrime responses.

Through robust regional collaboration within ASEAN and international engagement with partners such as OSCE, the AOC exemplifies how national initiatives can contribute effectively to a secure, inclusive, and trusted global digital ecosystem. Its multifaceted approach underscores the vital role of integrated technology, policy, and cooperation in accelerating sustainable development and ensuring that digital transformation benefits all segments of society.

Social Economic and Environmental Impact of the Project

The establishment of the **Anti-Online Scam Operation Center (AOC)** has significantly strengthened Thailand's social and economic resilience against the pervasive threat of online financial crime. By transforming a traditionally slow and fragmented complaint-handling system into a coordinated, real-time mechanism for fraud detection, case monitoring, and financial intervention, the AOC has revolutionized how cybercrimes are addressed nationally. This shift has enhanced the speed and effectiveness of responses, protecting victims and disrupting criminal networks more efficiently.

Figures 7 & 8. Deputy Minister and Minister Prasert Jantararuangtong and Permanent Secretary Professor Wisit Wisitsora-At of the Ministry of Digital Economy and Society discuss the AOC operations with key agencies to enhance cooperation against online scams.

Among the key innovations introduced by the AOC are the integration of coordinated bank systems for real-time Know Your Customer (KYC) verification, an accessible online police reporting portal via www.thaipoliceonline.go.th, and the capability for instant suspension of suspicious accounts combined with continuous transaction monitoring. These technological and operational advancements have drastically reduced response times for victims, improved case resolution efficiency, and prevented further financial losses from cascading through interconnected scam networks.


Figures 9 & 10. The AOC leverages advanced technology for real-time monitoring, data analysis, and operational coordination to combat online scams efficiently.

The impact of the AOC is clearly demonstrated by measurable outcomes. In the period preceding its launch, from March 1, 2022, to March 31, 2023, Thailand recorded 229,923 online scam reports resulting in financial damages totaling 34.501 billion baht. Following the AOC's implementation, from March 1, 2024, to March 31, 2025, over 1.18 million scam cases were handled, with 521,915 mule accounts suspended and financial losses prevented amounting to 19.964 billion baht—a notable 42.14% reduction in overall damages. More recently, between November 1, 2023, and May 31, 2025, the center received 1,769,958 calls, resulting in the suspension of 686,515 scam-related accounts and identification of damages totaling 29.75 billion baht.

Beyond these impressive statistics, the AOC serves as a critical national data hub, enabling proactive policy development, targeted law enforcement strategies, and informed public education through comprehensive crime pattern analysis. Its presence has significantly bolstered public trust in digital platforms, enhanced digital literacy, and cultivated a heightened sense of security within the digital ecosystem. While the project's core impacts are social and economic, it also contributes positively to environmental sustainability by reducing the need for physical travel through its fully digitized, paperless reporting and case management system, thereby lowering carbon footprints associated with traditional law enforcement processes.

In sum, the AOC not only mitigates the financial and social consequences of online scams but also promotes a safer, more inclusive, and environmentally conscious digital society across Thailand.

Highlights of the Project's Partnerships Activities

The success of the **Anti-Online Scam Operation Center (AOC)** is fundamentally rooted in robust, multi-stakeholder partnerships that bring together key government agencies, regulatory bodies, financial

institutions, and telecommunications operators. These strategic collaborations are critical in enhancing the effectiveness of fraud prevention, dismantling criminal networks, and safeguarding the public from online financial crimes. The seamless coordination among these diverse partners enables the AOC to operate as a highly efficient, centralized hub that strengthens Thailand's overall digital security framework and cultivates a more resilient, fraud-resistant financial and telecommunications environment.

1. **Royal Thai Police:** Central to this network of cooperation is the Royal Thai Police, with whom the AOC is fully integrated via the Thai Police Online platform. This integration allows individuals to report online fraud swiftly and conveniently through the 1441 hotline or the dedicated website, www.thaipoliceonline.go.th. This streamlined reporting system not only increases accessibility for victims but also accelerates investigations and ensures timely law enforcement interventions to combat cybercrime effectively.
2. **Bank of Thailand (BOT):** The Bank of Thailand (BOT) plays a pivotal role in the AOC's operations by enabling real-time coordination with the banking sector. This collaboration facilitates the immediate freezing of scam-related bank accounts and expedites Know Your Customer (KYC) processes for victims. These measures are instrumental in preventing further unauthorized fund transfers and significantly bolster the country's defenses against financial fraud.
3. **Anti-Money Laundering Office (AMLO):** Another key partner, the Anti-Money Laundering Office (AMLO), works closely with the AOC by verifying lists of suspected mule accounts provided by the center. Once confirmed, these accounts are publicly disclosed to alert both the public and financial institutions. Additionally, AMLO contributes to the center's proactive approach by feeding data into analytics systems that identify fraud patterns, enabling more targeted and effective countermeasures.
4. **National Broadcasting and Telecommunications Commission (NBTC):** Collaboration with the National Broadcasting and Telecommunications Commission (NBTC) is essential in addressing the telecommunications aspect of online scams. The AOC and NBTC jointly investigate and suspend phone numbers associated with fraudulent activities. NBTC mandates telecom operators to provide critical data such as usage history, location, and ownership information, empowering authorities to trace suspects and disable communication channels exploited by scammers.
5. **Securities and Exchange Commission, Thailand (SEC):** Furthermore, the Securities and Exchange Commission (SEC) of Thailand partners with the AOC to tackle cryptocurrency-related scams, which represent a growing threat within the digital financial landscape. The SEC works with digital asset service providers to freeze suspicious cryptocurrency accounts upon request, thereby preventing illicit transactions and protecting victims. This partnership extends the AOC's fraud prevention efforts into the emerging domain of digital assets, helping to disrupt novel forms of financial cybercrime.

Collectively, these partnerships embody a comprehensive, multi-dimensional approach to combating online scams, enabling the AOC to maximize its impact through collaborative expertise, data sharing, and coordinated enforcement. This integrated model not only enhances Thailand's cyber resilience but also serves as a benchmark for holistic, multi-agency cooperation in the fight against financial cybercrime.

Challenges and Projects Future Perspectives

The **Anti-Online Scam Operation Center (AOC)** faces several significant challenges as it strives to combat increasingly sophisticated online scams. A primary concern is the rapid evolution of scam tactics, which now frequently involve complex cross-border networks, advanced social engineering techniques, and the growing use of digital assets to facilitate illicit activities. While the AOC has begun implementing early-stage AI technologies, achieving more mature and robust AI capabilities remains a critical priority. Enhanced AI-driven tools will enable automated fraud detection, predictive analytics, and more efficient investigative processes, thereby increasing the likelihood of apprehending and prosecuting offenders throughout the entire online crime ecosystem.

Another ongoing challenge is maintaining consistent and effective public awareness amid the constantly shifting landscape of online scams. Scammers continuously adapt their methods, making it imperative for the AOC to sustain comprehensive digital literacy campaigns that educate the public—especially vulnerable populations—on how to recognize and avoid fraudulent schemes. Building and maintaining trust in digital platforms depends heavily on these continuous educational efforts to empower individuals with the knowledge and skills to protect themselves.

Looking to the future, the AOC envisions expanding its role beyond a national framework to become a regional and potentially global platform for collaboration. A key strategic ambition is to establish interconnected centers modeled after the AOC across multiple countries, facilitating real-time information sharing, exchange of case studies, and dissemination of best practices in combating online scams. This regional and international cooperation will foster a more unified and coordinated response to the challenges posed by transnational cybercrime.

With sustained investment in advanced AI technologies, the expansion of multi-stakeholder partnerships, and proactive international engagement, the AOC is well-positioned to evolve into a scalable and replicable model of digital trust, fraud prevention, and cybercrime response. Its growth will contribute significantly to creating a safer, more secure digital environment both within Thailand and across the global digital ecosystem.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes serve as highly valuable platforms that significantly contribute to fostering international cooperation, facilitating the exchange of knowledge, and enhancing the global visibility of impactful ICT initiatives. These platforms offer countries and organizations a unique opportunity to showcase innovative digital solutions, enabling participants to learn from diverse experiences and to strengthen collaborative networks dedicated to achieving sustainable development goals. For the Anti-Online Scam Operation Center (AOC), active participation in the WSIS process not only underscores Thailand's strong commitment to combating online scams and financial cybercrime but also deepens its engagement within the global digital community. Furthermore, WSIS platforms play a crucial role in accelerating the adoption of proven best practices, nurturing new strategic partnerships, and inspiring continued innovation by recognizing and rewarding projects that advance inclusive, trusted, and secure digital transformation worldwide. Through these mechanisms, WSIS reinforces the collective effort to build a more resilient and equitable digital future for all.

AI & Facial Recognition Powered Solution for Telecom SIM Subscriber Verification

Centre for Development of Telematics

Republic of India

Basic Information about the Entity

The **Centre for Development of Telematics (C-DOT)** is a premier Indian government organization dedicated to advancing telecommunications technology and innovation. It operates from two key locations: its main campus in Mehrauli, New Delhi (PIN 110030), and a significant facility in Electronic City Phase 1, Bengaluru, Karnataka (PIN 560100). C-DOT's mission is to design and develop cutting-edge technologies, products, and solutions tailored to address the unique telecommunications needs of India. Special emphasis is placed on supporting strategic sectors and enhancing connectivity in rural and underserved regions, thereby contributing to national development priorities. Through its work, C-DOT plays a crucial role in driving India's telecommunications self-reliance and fostering inclusive digital growth. More information about the organization and its initiatives can be found on its official website: https://www.cdot.in.

Project's Description (Activities Description)

The **AI and Facial Recognition Powered Solution for Telecom SIM Subscriber Verification (ASTR)** project is a cutting-edge initiative designed to bolster national security and combat telecom-based cyber fraud across India by harnessing advanced Artificial Intelligence (AI) and facial recognition technologies. This innovative system consolidates subscriber data from all Indian Telecom Service Providers (TSPs) to effectively detect fraudulent SIM card registrations and prevent identity duplication. By doing so, ASTR aims to safeguard digital identities and strengthen the integrity of telecom networks nationwide.

The project comprises several key technological components. A custom-trained face recognition engine, specifically developed using diverse Indian demographic data, ensures high accuracy even in challenging conditions such as disguise, aging, pose variations, and the presence of ethnicity-based headgear. Complementing this is an image quality assessment and enhancement module that automatically evaluates and improves low-quality facial images, thereby boosting recognition reliability. A horizontally scaled clustering mechanism enables the efficient management and rapid searching of billions of facial records across distributed nodes, supporting nationwide data processing. Additionally, a fuzzy logic-based subscriber detail and text matching engine intelligently compares demographic information—such as name, father's name, address, and date of birth—using sophisticated fuzzy matching algorithms to confirm identities accurately.

The primary goals of the ASTR project include providing a robust facial de-duplication system to prevent the issuance of multiple SIM cards under fake or duplicated identities, identifying fraudulent SIM activations across various registration methods, and sharing verified lists of fraudulent connections with TSPs for prompt examination and disconnection. Beyond telecom operators, these lists are also shared with banks, payment wallet providers, and social media platforms to disconnect fraudulent numbers, thereby limiting their misuse in financial and digital ecosystems. The project also features capabilities to detect and analyze geographical hotspots prone to SIM fraud and assists law enforcement agencies (LEAs) by providing critical intelligence on Points of Sale (PoS) implicated in issuing illegal SIM cards.

ASTR Pan India Analysis Stats	
No. of mobile connections analyzed	1.34 Billion
Suspected connections detected	8.1 Million
Disconnected after re-verification	7.8 Million
PoS (SIM Agents) blacklisted	71,000
Total FIRs registered	365
No. of PoS against whom FIR lodged	1890

The target beneficiaries of ASTR include law enforcement agencies, telecom service providers, financial institutions such as banks and digital payment platforms, and social media services including WhatsApp. Indirectly, the project benefits the wider citizenry by enhancing digital safety and security. Particular emphasis is placed on protecting vulnerable communities—including migrants, older persons, and residents of remote, rural, or economically disadvantaged areas—who are often disproportionately targeted by telecom fraud schemes.

Through these comprehensive technological and operational measures, the ASTR project represents a significant advancement in India's efforts to secure telecommunications infrastructure, protect users' identities, and foster a safer digital environment for all.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The ASTR project strongly aligns with multiple WSIS Action Lines, demonstrating its comprehensive contribution to advancing global ICT development and security. Notably, under **WSIS Action Line C5: Building Confidence and Security in the Use of ICTs**, ASTR plays a critical role in detecting and preventing fraudulent SIM registrations, thereby safeguarding digital identities and helping law enforcement agencies track cybercriminals. This significantly enhances trust and security within the telecom ecosystem.

In relation to **WSIS Action Line C6: Enabling Environment**, ASTR supports the digital governance framework by assisting telecom regulators in enforcing stringent Know Your Customer (KYC) policies and preventing financial fraud. Importantly, it promotes the responsible use of AI technologies for fraud detection, ensuring privacy rights are respected throughout its operations.

Under **WSIS Action Line C7: ICT Applications—E-Government, E-Business, and E-Justice**, ASTR facilitates improved public service delivery and security. For E-Government, it aids in verifying SIM registrations for social welfare programs, ensuring benefits reach the intended recipients. In E-Business and banking, it helps prevent financial fraud linked to SIM-based transactions. For E-Justice, it provides law enforcement agencies with crucial support in tracking and prosecuting cybercriminals exploiting fraudulent SIM connections.

The project also significantly advances several Sustainable Development Goals. Under **SDG 9: Industry, Innovation, and Infrastructure**, ASTR strengthens digital infrastructure by preventing SIM fraud and leverages AI-driven analytics to foster innovation in cybersecurity. In supporting **SDG 16: Peace, Justice, and Strong Institutions**, it contributes to preventing cybercrime, promoting institutional accountability, and aiding law enforcement investigations through comprehensive fraud analytics. The project bolsters **SDG 8: Decent Work and Economic Growth** by securing financial transactions, thereby protecting businesses and fostering a trustworthy digital economy. Through its focus on safeguarding marginalized populations from exploitation, ASTR contributes to **SDG 10: Reduced Inequalities**, ensuring vulnerable communities are protected from digital fraud. Further, under **SDG 11: Sustainable Cities and Communities**, ASTR provides data-driven insights that support secure urban digital governance, laying the foundation for smart city infrastructures that are resilient against cyber threats. Finally, through its collaborative partnerships with telecom operators, regulators, and law enforcement, the project promotes **SDG 17: Partnerships for the Goals**, fostering public-private cooperation to strengthen telecom security and combat cybercrime effectively.

Aligned with the Global Digital Compact's vision of an open, free, and secure digital future, the ASTR project contributes substantially to **several key GDC objectives. It promotes inclusive and equitable digital transformation** by equipping law enforcement with advanced AI tools that protect all citizens—especially vulnerable groups such as women, children, and the elderly—thus enhancing safety and inclusion. ASTR's capability to assist in the recovery of missing persons further underscores its social impact.

Regarding **open and secure digital infrastructure**, ASTR directly strengthens the telecom ecosystem by detecting and preventing SIM fraud, encouraging telecom service providers to implement robust KYC processes, and blacklisting Points of Sale involved in fraudulent SIM issuance. This comprehensive approach discourages illegal distribution networks and fosters a resilient and trustworthy digital infrastructure. The project's modular design allows seamless integration with other smart city and policing platforms, enhancing its adaptability and interoperability.

In the realm of **responsible use of emerging technologies**, ASTR employs AI, computer vision, fuzzy logic, and distributed computing to address critical real-world challenges without compromising data privacy or engaging in commercialization of personal information. Built with stringent security measures—including encryption, secure access, audit logs, and strict role-based controls—ASTR ensures that data usage complies with India's legal and ethical frameworks. The indigenous development of this technology offers enhanced accountability and control over data handling compared to reliance on foreign systems. Furthermore, the project has effectively addressed potential biases inherent in India's ethnically diverse population, ensuring accurate facial recognition performance across various demographics.

Through these multifaceted contributions, the ASTR project exemplifies how national innovations can advance global digital development goals, foster trust and security in ICTs, and support an inclusive, equitable, and sustainable digital future.

Social Economic and Environmental Impact of the Project

The ASTR project has generated substantial social, economic, cultural, and environmental impacts, contributing to a more secure and resilient digital ecosystem in India. Economically, the project has significantly reduced financial losses by preventing telecom and banking fraud, thereby safeguarding billions of rupees in transactions for both citizens and financial institutions. By dismantling cybercrime syndicates, ASTR disrupts illicit economic activities and redirects resources toward legitimate economic channels. This also translates into cost savings for telecom service providers by minimizing fraudulent SIM issuance, which reduces the expenses related to fraud investigations and legal proceedings. Furthermore, ASTR enhances business revenues by ensuring secure mobile transactions that build consumer trust and encourage the adoption of digital financial services. On a qualitative level, the project strengthens public security, instilling greater confidence among citizens who recognize the government's proactive stance against telecom fraud. It also bolsters telecom security, fostering trust that promotes wider digital adoption. Additionally, ASTR supports the fintech sector by reinforcing security in digital banking and mobile wallets, while providing policymakers with valuable data-driven insights to improve governance and fraud prevention strategies.

From a social perspective, the project has contributed to the measurable reduction of cybercrime by aiding law enforcement in tracking fraudsters and decreasing identity theft cases. It plays a critical role in protecting vulnerable populations—including the poor, elderly, and migrants—by identifying and preventing fraud schemes targeted at these groups. ASTR further enhances public safety by curbing fraudulent SIM usage linked to organized crime, terrorism, and trafficking, thereby strengthening national security. This also results in increased consumer confidence in mobile and digital financial services. Beyond its role in fraud prevention, ASTR supports humanitarian efforts by facilitating the identification of missing persons and deceased individuals, proving invaluable in disaster response and victim identification.

Highlights of the Project's Partnerships Activities

The success of the ASTR project is underpinned by strong, multi-stakeholder partnerships that are essential to its effective implementation and impact. A key partner is the Department of Telecommunications (DoT), Government of India, which serves as the primary policy driver and enabler for the initiative. The DoT facilitates access to telecom subscriber data across all Telecom Service Providers (TSPs) and coordinates regulatory enforcement actions based on ASTR's findings. This includes issuing directives to TSPs for the timely disconnection of fraudulent SIM cards, ensuring compliance with national security objectives.

Telecom Service Providers play a critical operational role by supplying subscriber images, Customer Acquisition Forms (CAFs), and KYC (Know Your Customer) details necessary for the project's comprehensive fraud detection processes. These providers actively utilize ASTR's analysis to identify and disconnect fraudulent SIM connections after verification, and they regularly share updates and results with both the DoT and C-DOT to support ongoing monitoring and improvement.

Law Enforcement Agencies (LEAs) rely on ASTR as a valuable tool for cybercrime investigations, enabling them to identify repeat offenders, absconders, and fraud networks with greater precision. Using the system's facial similarity and demographic matching capabilities, LEAs are able to file First Information Reports (FIRs) related to collusion at Points of Sale (PoS) and other criminal activities linked to fraudulent SIM usage.

Additionally, the project benefits from partnerships with social media platforms and financial institutions. Platforms such as WhatsApp respond to ASTR's reports of fraudulent numbers by disabling associated accounts, thereby reducing the misuse of communication channels for criminal purposes. Financial institutions, including banks and digital wallets, collaborate by delinking fraudulent SIMs from their systems, significantly curbing the potential for digital financial fraud.

Together, these partnerships form a comprehensive ecosystem that strengthens the integrity of telecom services, enhances cybersecurity, and protects citizens from increasingly sophisticated fraud schemes.

Challenges and Projects Future Perspectives

The ASTR project has encountered several significant challenges that must be addressed to enhance its effectiveness and scalability. One of the foremost technical challenges is managing the scalability and performance demands of processing approximately 1.34 billion images with minimal latency. Achieving near real-time fraud detection requires continual optimization of computing resources and infrastructure to maintain system responsiveness and reliability.

Data privacy and security also present critical concerns, given the sensitive nature of subscriber information handled by the system. Ensuring secure data storage and transmission is paramount, necessitating robust encryption protocols and stringent access control mechanisms to prevent unauthorized use or data breaches. Additionally, the integration of diverse data formats from multiple Telecom Service Providers (TSPs)—ranging from paper-based Customer Acquisition Forms (CAFs) to digital Know Your Customer (dKYC and eKYC) records—poses challenges in achieving seamless interoperability and standardization.

Moreover, the system must contend with inherent complexities in facial recognition technology. Variations due to disguises, occlusions, diverse skin tones, and differing skeletal structures require ongoing enhancements to improve recognition accuracy and reduce false negatives or positives.

Looking ahead, the project aims to incorporate advanced artificial intelligence and machine learning models that are self-adaptive, capable of evolving alongside emerging and increasingly sophisticated fraud patterns. There is a strategic vision to extend the scope of ASTR beyond the telecom sector, applying its capabilities to detect and prevent fraud in banking, insurance, and other financial domains. This expansion will further support law enforcement agencies in tracking criminals and locating missing persons, amplifying its social impact.

To strengthen regulatory oversight and enforcement, the development of a centralized, Pan-India fraud analytics dashboard is planned. This platform will enable real-time monitoring of fraudulent activities across telecom zones and financial networks, facilitating faster intervention and coordination among stakeholders. Additionally, efforts are underway to enhance data security and compliance by exploring blockchain-based identity verification systems, which can offer tamper-proof record-keeping and increased trustworthiness.

Finally, the project envisions collaboration with international partners to replicate the ASTR model globally, fostering cross-border cooperation in combating transnational fraud and cybercrime. Research collaborations with global agencies will further refine the technology and its application, ensuring that ASTR remains at the forefront of digital trust and security innovation.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms serve as vital instruments for fostering international collaboration, advancing global development goals, and amplifying the reach of innovative digital solutions such as the ASTR project. These platforms offer a unique opportunity to bring together diverse stakeholders—including governments, international organizations, the private sector, academia, and civil society—to share knowledge, build partnerships, and collectively address the challenges posed by digital transformation.

From the perspective of international development, WSIS's alignment with key Action Lines and the United Nations Sustainable Development Goals (SDGs) underscores its significance. Projects like ASTR directly contribute to global priorities such as SDG 9 (Industry, Innovation, and Infrastructure) by enhancing digital infrastructure and promoting technological innovation, as well as SDG 16 (Peace, Justice, and Strong Institutions) through strengthening security and supporting effective law enforcement. By offering a platform for showcasing scalable, replicable models, WSIS enables emerging economies to adopt best practices and innovative approaches that can effectively combat cybercrime and fraud in their own contexts.

In terms of networking, WSIS forums are invaluable for fostering meaningful connections between policymakers, technical experts, and development practitioners. These interactions facilitate dialogue on regulatory frameworks, encourage technology transfer, and stimulate collaborative research efforts, which collectively accelerate the adoption and improvement of digital technologies for sustainable development.

Furthermore, participation in the WSIS Prizes and Stocktaking elevates the visibility of projects like ASTR on a global stage, providing international recognition for homegrown, AI-powered solutions that demonstrate measurable impact in combating cybercrime. This heightened visibility attracts potential partnerships, funding opportunities, and cross-sector collaborations, thereby positioning ASTR for wider adoption and scalability across different countries and regions.

Overall, the WSIS Stocktaking and Prizes contests not only celebrate digital innovation but also serve as strategic platforms that catalyze international cooperation, promote inclusive digital growth, and inspire continuous innovation aligned with the global development agenda.

WSIS Action Line C6. Enabling environment

Digitech

Department of Communications and Digital Technologies

Republic of South Africa

Basic Information about the Entity

The **Department of Communications and Digital Technologies (DCDT)** is a national government department located in Pretoria, South Africa. It is responsible for leading the country's digital transformation and ensuring that information and communication technologies (ICTs) serve as tools for inclusive development and social justice. Guided by the Constitution of the Republic of South Africa (1996) and the democratic values outlined in the Bill of Rights—human dignity, equality, and freedom—the DCDT plays a crucial role in aligning digital transformation with the country's broader social and economic goals.

In line with the National Development Plan's vision for 2030, the department works to build a dynamic information society and knowledge economy that supports full participation by citizens, businesses, and the public sector. The DCDT actively leverages the opportunities presented by the Fourth Industrial Revolution (4IR) to enhance prosperity, well-being, and safety across all segments of society. The Department's vision is to be *"a leader in enabling a connected and digitally transformed South Africa."*Its mission is to *"create an inclusive digital environment to foster a thriving digital society and economy."* From its offices in Pretoria, the DCDT drives policies and programs that promote digital access, innovation, and equity, positioning South Africa for long-term competitiveness and inclusive growth in the global digital economy.

Project's Description (Activities Description)

The **Digitech Project** is a flagship initiative of the **Department of Communications and Digital Technologies (DCDT)** aimed at accelerating South Africa's digital innovation landscape. It functions as a digital enablement and marketplace platform that identifies, supports, and promotes local ICT-based Small, Medium, and Micro Enterprises (SMMEs), helping them gain visibility, access to markets, and form strategic partnerships.

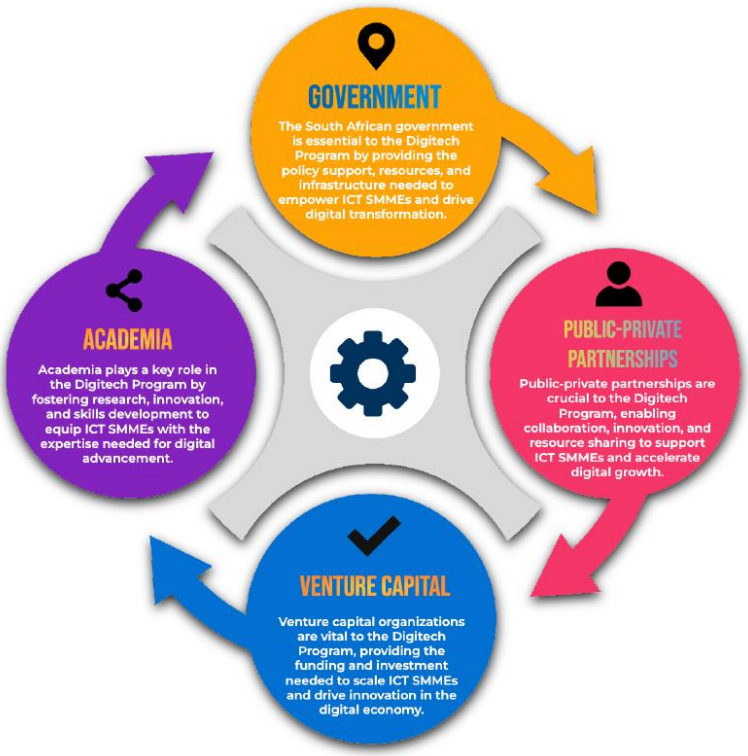
At the core of the project is the Online Marketplace Portal, a national digital platform where verified South African ICT SMMEs showcase innovations across sectors such as HealthTech, EdTech, FinTech, and AgriTech. This portal connects them to government, private sector, and international partners.

Innovation Verification and Curation ensures the credibility and readiness of solutions through expert-led assessments, while Capacity Building and Development Support provides training, mentorship, incubation, and product development via industry partnerships.

The project also focuses on Access to Markets and Procurement, positioning local technologies as viable alternatives in both public and private sector procurement. Additionally, International Exposure and Trade Missions, such as participation in GITEX Global, offer selected SMMEs global networking and investment opportunities.

The Digitech Project seeks to stimulate the digital economy, support job creation, foster local content development, and promote digital inclusion—particularly among youth and women entrepreneurs. By creating a robust ecosystem of innovation and collaboration, Digitech contributes to building a more inclusive, self-sustaining, and competitive digital future for South Africa.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance



The Digitech Project aligns closely with **WSIS Action Line 6: Enabling Environment**, which focuses on fostering inclusive and equitable policy frameworks that enable the growth of the digital economy. By creating a structured platform that supports South African ICT SMMEs, Digitech provides a conducive environment for digital innovation and entrepreneurship, particularly for historically disadvantaged groups. The project supports the implementation of national strategies such as the Digital Economy Masterplan and encourages institutional collaboration with entities like CSIR and SEDA. It also fosters

engagement between public institutions, academia, and the private sector to strengthen the policy ecosystem and promote digital transformation.

In terms of the **Sustainable Development Goals (SDGs)**, the Digitech Project supports multiple targets through its inclusive and innovation-driven approach:

- **SDG 8 (Decent Work and Economic Growth):** By onboarding and supporting over 100 ICT SMMEs, Digitech facilitates job creation and stimulates entrepreneurship, particularly among youth and women in the technology sector.
- **SDG 9 (Industry, Innovation and Infrastructure):** Digitech strengthens local digital infrastructure by promoting homegrown solutions in sectors such as FinTech, HealthTech, EdTech, and AgriTech, thereby fostering industrial growth and innovation.
- **SDG 10 (Reduced Inequalities):** The project prioritizes innovators from underserved and marginalized communities, actively working to reduce the digital divide and promote equitable access to market opportunities.
- **SDG 17 (Partnerships for the Goals):** Digitech relies on strong public-private-international partnerships, demonstrating the importance of collaboration in achieving digital inclusion and national development goals.

Additionally, the Digitech Project supports the **Global Digital Compact (GDC)** objectives by: Promoting local innovations that improve digital connectivity and digital tools for education; Supporting interoperability and integration with existing systems to avoid internet fragmentation; Ensuring ethical standards and human rights are respected through innovation curation and digital literacy programs; Encouraging human-centered AI development that addresses societal needs; Advancing the development of digital public goods and accessible solutions for public institutions; Prioritizing the inclusion of women, youth, and people with disabilities in digital entrepreneurship; and Building trust and safety online through verification processes and awareness initiatives.

Through these contributions, Digitech demonstrates how national digital innovation programs can effectively advance both WSIS Action Lines and the United Nations SDGs, while also contributing to a secure, inclusive, and human-centered global digital future.

Social Economic and Environmental Impact of the Project

The **Digitech Program** has had a transformative impact on South Africa's innovation ecosystem by empowering small, medium, and micro enterprises (SMMEs), enhancing digital inclusion, and contributing meaningfully to the country's economic development. Through its multi-stakeholder, innovation-driven approach, the program has not only supported digital entrepreneurship but also positioned South Africa as a frontrunner in ICT innovation across the continent.

Social Impact

At its core, Digitech promotes **social inclusion** by reducing barriers to participation in the digital economy. By prioritizing SMMEs owned by youth, women, and innovators from townships and underserved communities, the platform ensures that innovation is both diverse and representative of the country's demographic.

- **Empowerment of ICT SMMEs**: Over 100 local tech enterprises have been onboarded, many of which have gained visibility and access to new opportunities, including pitch sessions and mentorship programs.
- **Equitable Access**: More than 45% of these enterprises are youth- or women-owned, reflecting the program's commitment to empowering historically marginalized groups.
- **Digital Literacy and Skills**: Through capacity-building efforts with partners such as IBM, Microsoft, and Cisco, the program supports digital skills development and responsible technology use, contributing to a more informed and empowered society.

Economic Impact

The Digitech Program is a **catalyst for economic growth and job creation**, enabling local innovators to scale and compete globally.

- **Market Access and Visibility**: Digitech serves as a verified marketplace for South African digital solutions, enabling SMMEs to engage with both public and private sector buyers, and gain international exposure through events like GITEX Dubai and ITU forums.
- **Job Creation**: Participating enterprises have collectively supported or created more than 400 jobs since the program's launch—particularly in high-demand tech sectors like AI, cybersecurity, software development, and platform services.
- **Local Procurement and Sovereignty**: By showcasing local alternatives to imported technologies, the program supports national efforts to localize ICT procurement and strengthen digital sovereignty.

Environmental Impact

While Digitech's direct environmental footprint may be modest, its **indirect contributions to environmental sustainability** are notable:

- **Promotion of Green Tech Solutions**: Some of the onboarded SMMEs focus on AgriTech and sustainable technologies that promote efficient resource use, climate resilience, and responsible consumption.
- **Digital Public Goods**: The program encourages innovations that reduce paper-based processes and foster sustainable governance and education tools, contributing to environmental efficiency through digital transformation.

Strengthening the Innovation Ecosystem

Digitech plays a strategic role in **connecting stakeholders across the digital innovation landscape**, fostering a holistic and collaborative environment:

- **Ecosystem Building**: The program connects SMMEs to incubators, R&D centers, funding agencies, and government departments, ensuring long-term sustainability.
- **Strategic Partnerships**: Collaborations with major players like Google, Huawei, Microsoft, CSIR, and the Department of Science and Innovation have led to co-developed initiatives in product testing, enterprise development, and digital capacity building.

- **Policy Alignment**: Digitech reinforces national policies such as the Digital Economy Masterplan and contributes to coordinated efforts to build a thriving and inclusive digital society.

Challenges and Projects Future Perspectives

While the Digitech Program has marked significant milestones in advancing digital innovation and SMME empowerment in South Africa, it also faces several structural and operational challenges that limit its full transformative potential. These hurdles highlight the complexity of building an inclusive digital economy and underscore the need for sustained institutional support, strategic partnerships, and adaptive policy frameworks.

Challenges

One of the most pressing challenges is the limited access to funding and investment. Many promising SMMEs lack the capital to transition from prototype to scalable products, with insufficient access to working capital or venture funding often stalling their growth. This financial gap affects not only product development but also the broader commercial viability of homegrown innovations.

A second barrier lies in the slow uptake of verified Digitech solutions by government departments. Despite meeting quality standards, many innovations face resistance due to legacy procurement systems and institutional risk aversion. This delays market entry and restricts opportunities for SMMEs to demonstrate their value within public sector applications.

Digital infrastructure gaps also hinder inclusive participation. Innovators based in townships and rural areas often contend with unreliable connectivity, inadequate hardware, and lack of enabling environments, deepening the urban-rural digital divide and reducing the diversity of contributions to the digital economy.

Further, capacity and skills gaps remain a challenge. Many SMMEs require structured support in areas such as business modeling, IP management, compliance, and export readiness. Without such foundational support, technically sound solutions may struggle to reach the market.

Lastly, the fragmentation of the innovation ecosystem—with limited coordination among incubators, funders, regulators, and support agencies—creates inefficiencies and missed opportunities. Navigating this fragmented landscape can be difficult for early-stage innovators, reducing their chances of success.

Future Perspectives

In response to these challenges, the Digitech Program is entering a new phase of strategic expansion and institutional strengthening. Several key initiatives are in development to ensure the program remains a robust driver of digital inclusion and economic growth.

A revamped Digitech digital platform is set to be launched, offering improved features for innovation discovery, SMME profiling, procurement matching, and data analytics to better track impact and inform strategy. This will enhance user experience and strengthen the platform's role as a national digital innovation hub.

To address procurement barriers, the program is engaging in policy advocacy with the National Treasury, SITA, and the National School of Government to fast-track verified Digitech innovations into

public sector systems. This could significantly improve government uptake of local technologies and open new avenues for SMME growth.

On a continental scale, Digitech aims to support regional replication and cross-border collaboration. As part of South Africa's G20 presidency, the initiative will contribute to the establishment of the African Digital Acceleration Centre. This centre will showcase African SMMEs, promote cross-border partnerships, and serve as a springboard for continental scale-ups through platforms like the G20 StartUp Challenge.

Efforts are also underway to strengthen the innovation pipeline, with deeper partnerships being formed with institutions such as CSIR, Seda, and local universities. This will help create a seamless pathway from ideation to commercialization for digital entrepreneurs.

To address investment gaps, the Department is preparing to launch a Digital SMME Investor and Mentorship Marketplace—a platform that will link Digitech innovators with funders, accelerators, and corporate partners, thereby unlocking vital capital and guidance.

Finally, to ensure inclusive access, localized innovation hubs will be established in partnership with provincial governments and private sector actors. These hubs will bring the Digitech platform closer to township and rural innovators, providing tailored support and tools to drive grassroots digital transformation.

WSIS Action Line C7. ICT Applications: E-Government

TAMM AI Assistant: The AI-Powered Government Agent Redefining Public Services

Department of Government Enablement

United Arab Emirates

Basic Information about the Entity

The **Department of Government Enablement (DGE)** is a key entity within the Abu Dhabi Government, located in the capital of the United Arab Emirates. As a central enabler of digital transformation, DGE is responsible for delivering integrated, seamless, and citizen-centric government services across the emirate. Its core mission is to enable exceptional experiences for individuals, businesses, and government stakeholders through innovative, data-driven services and advanced digital solutions.

DGE plays a pivotal role in driving efficiency, agility, and customer satisfaction across the public sector by leveraging emerging technologies, streamlining government processes, and fostering collaboration across various departments. By unifying access to over 700 government services through the TAMM platform, DGE empowers residents and investors with a single digital gateway to interact with government entities conveniently and securely.

For more information, visit the official websites: **https://www.dge.gov.ae/en/** **or** https://www.tamm.abudhabi

Project's Description (Activities Description)

The **TAMM AI Assistant** is a pioneering artificial intelligence-powered solution at the core of TAMM, Abu Dhabi's unified digital government platform. Designed to transform how people interact with public services, TAMM provides seamless, intuitive access to over 1,000 government services through a single, integrated app environment. This initiative is a central component of Abu Dhabi's ambitious digital transformation strategy, which seeks to build a more efficient, inclusive, and citizen-centric public sector.

Functioning as a multilingual digital companion, the TAMM AI Assistant redefines service delivery for residents, visitors, businesses, and the broader Abu Dhabi community. Co-created by more than 40 Abu Dhabi Government entities, it represents one of the most comprehensive and collaborative cross-government AI initiatives globally—demonstrating the power of unified governance and innovation at scale. By simplifying complex government interactions, the AI Assistant now serves 3.2 million people, contributing significantly to enhancing public service efficiency and user satisfaction.

The assistant acts as a predictive digital concierge, eliminating the need for time-consuming forms or in-person visits to service centers. Whether renewing a vehicle registration, applying for a business permit, or paying a fine, users can interact with the assistant through natural language commands—

spoken or typed—in their preferred language. The assistant processes requests instantly, completes end-to-end transactions, and even anticipates future needs by providing proactive notifications and support.

Powered by cutting-edge technologies such as large language models (LLMs), predictive analytics, real-time sentiment analysis, and speech recognition, TAMM AI Assistant is built to ensure high performance within a framework grounded in privacy, inclusivity, and transparency. By placing the user at the center of the digital experience, the solution not only accelerates digital adoption but also reflects Abu Dhabi's broader vision of becoming a global leader in digital governance and AI integration.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

TAMM AI Assistant directly supports **WSIS Action Line C7: ICT Applications – E-Government**, by providing seamless, multilingual access to a comprehensive suite of over 1,000 digital government services. Designed with inclusivity and accessibility at its core, TAMM AI Assistant redefines how citizens, residents, and businesses interact with public services in the digital era. In a city of nearly 3 million people from diverse cultural and linguistic backgrounds, the Assistant enables users to engage with government services in their preferred language—spoken or typed—anytime and from anywhere. This inclusive access model ensures that public services are not only more convenient but truly people-centric.

Through its AI-powered automation, TAMM AI Assistant simplifies complex, previously manual processes. It auto-completes transactions, retrieves official documents, and delivers proactive service recommendations tailored to individual life events, such as ID renewals, relocations, childbirth, and business activities. These capabilities have led to the elimination of over **25 million physical visits** to government service centers annually and generated more than **AED 520 million in cost savings**, reflecting the scale and efficiency of digital transformation.

TAMM AI Assistant also advances several **key United Nations Sustainable Development Goals (SDGs)**:

- **SDG 9 – Industry, Innovation, and Infrastructure**: The integration of AI and intelligent automation into public service delivery modernizes digital infrastructure and enhances efficiency, replacing outdated workflows with smart, data-driven systems.
- **SDG 10 – Reduced Inequalities**: By enabling access to services through voice interaction and multilingual support, the Assistant ensures equitable access for marginalized and vulnerable populations, including seniors, persons with disabilities, and non-native speakers of Arabic or English.
- **SDG 11 – Sustainable Cities and Communities**: The reduction of physical visits to government offices has led to tangible environmental benefits, including the prevention of over **185,000 tons of CO_2 emissions** annually and the conservation of more than **7,000 native trees**. TAMM AI Assistant contributes to a greener, more sustainable urban ecosystem by reducing paper use and transport-related emissions.
- **SDG 16 – Peace, Justice, and Strong Institutions**: Built on principles of transparency, security, and ethical AI governance, the Assistant supports fair and traceable decision-making. Real-

time monitoring and observability tools empower government authorities to ensure accountability and maintain public trust.

- **SDG 17 – Partnerships for the Goals**: TAMM AI Assistant is the product of deep collaboration among over **40 government and private sector entities**. This unified, whole-of-government approach has positioned Abu Dhabi as a global leader in AI-powered governance, with TAMM serving as a replicable model for international partners.

TAMM AI Assistant also actively supports several core objectives of the **Global Digital Compact**, demonstrating how AI can be harnessed for inclusive, ethical, and sustainable digital transformation:

- **Access and Inclusion**: By offering both multilingual and voice-enabled interaction, the platform ensures that individuals of varying literacy levels, languages, and physical abilities can access government services with ease and dignity.
- **Trust and Ethics**: The Assistant was developed in full compliance with **Abu Dhabi's Responsible AI Framework**, and operates on secure sovereign cloud infrastructure. Built-in ethical safeguards—such as secure data handling, transparency in decision-making, and real-time AI performance monitoring—ensure responsible and trustworthy deployment.
- **Global Cooperation**: The TAMM AI initiative has drawn interest from global stakeholders, including G7 nations and leading technology organizations. Abu Dhabi continues to host high-level international delegations to share insights on TAMM's architecture and governance model. This engagement reinforces the project's commitment to knowledge-sharing and contributes to shaping the global discourse on safe, inclusive AI governance.

In all of these dimensions, TAMM AI Assistant serves as a real-world example of how governments can responsibly modernize public service delivery. It offers a scalable, impactful blueprint for other nations seeking to implement AI-driven digital infrastructure while upholding the principles of accessibility, equity, and ethical innovation.

Social Economic and Environmental Impact of the Project

TAMM AI Assistant has generated substantial and measurable impact across social, economic, cultural, and environmental domains, fundamentally transforming how residents, visitors, and businesses in Abu Dhabi access government services. Its deployment has enabled more inclusive, efficient, and sustainable public service delivery in line with the emirate's digital transformation agenda.

- **Social Impact:** TAMM AI Assistant significantly enhances accessibility to essential government services through its multilingual, voice- and text-enabled interface. Since its launch in October 2024, the Assistant has autonomously handled 95% of all service requests, engaged over 729,000 users in more than 1.3 million conversations, and facilitated the exchange of over 3 million messages. By automating the equivalent of 256,000 government agent hours annually, the Assistant acts as a force multiplier—reducing service wait times and minimizing reliance on physical service centers. This allows residents to focus more on their personal and professional lives while benefiting from responsive, always-available government support.
- **Economic Impact:** TAMM AI Assistant contributes directly to public sector efficiency and cost savings. It has enabled AED 520 million in annual cost avoidance through digital service

delivery within a unified platform. Of this, AED 133 million is specifically attributable to the Assistant's automation of complex government workflows, resulting in over 4 million working hours saved across various government entities each year. These efficiencies allow government staff to redirect their focus toward strategic initiatives such as policy development, innovation, and improved citizen engagement.

- **Cultural Impact:** Beyond efficiency, TAMM AI Assistant has become a trusted digital companion for Abu Dhabi's diverse population, enhancing public trust in government-led digital innovation. It embodies the values of openness, inclusion, and excellence in public service, and reflects a growing cultural acceptance of AI technologies in daily life. This is demonstrated by the platform's 98% positive sentiment rating, which underscores strong public confidence and a broader societal shift toward embracing AI-driven interactions.
- **Environmental Impact:** TAMM AI Assistant plays a vital role in supporting Abu Dhabi's environmental sustainability and Net Zero goals. By eliminating over 25 million in-person government visits annually, the platform has significantly reduced transportation-related emissions, eased urban congestion, and decreased paper consumption. These outcomes contribute meaningfully to environmental preservation and highlight how digital transformation can serve as a powerful enabler of climate action.

Highlights of the Project's Partnerships Activities

TAMM AI Assistant is the result of a robust, cross-government collaboration that reflects Abu Dhabi's commitment to delivering unified public services at scale. From conception to deployment, the initiative has been shaped by deep interdepartmental coordination across Abu Dhabi Government entities, establishing a new standard for integrated digital governance.

The project is led by the Department of Government Enablement (DGE), the authority responsible for executing Abu Dhabi's Digital Strategy 2025–2027. Under DGE's leadership, TAMM AI Assistant consolidates services, data, and operational frameworks from multiple government sectors into a single, user-centric platform. This ensures that residents, businesses, and visitors can access government services seamlessly—regardless of the originating department—through a consistent, intuitive interface.

At the private sector level, Microsoft has played a pivotal role as a strategic technology partner. The company has supported the development and deployment of TAMM AI Assistant's enterprise-grade architecture, provided tools for real-time system observability, and ensured alignment with global standards for ethical AI. Crucially, Microsoft has worked in close collaboration to ensure full compliance with Abu Dhabi's data sovereignty and privacy regulations. As a testament to the innovation and impact of this partnership, TAMM AI Assistant continues to be featured in Microsoft's global showcases, including at prestigious forums such as the World Economic Forum's Annual Meeting in Davos.

This comprehensive public-private collaboration has not only enabled TAMM AI Assistant to scale rapidly and responsibly, but has also positioned it as a global benchmark for the responsible and inclusive application of AI in public service delivery.

Challenges and Projects Future Perspectives

TAMM AI Assistant stands as a testament to Abu Dhabi's strategic vision for unified public service delivery, driven by a robust, cross-government collaboration. From initial concept through to implementation, the initiative has been shaped by extensive coordination among various Abu Dhabi Government entities, establishing a new paradigm for integrated digital governance.

Spearheaded by the Department of Government Enablement (DGE)—the entity tasked with leading the execution of Abu Dhabi's Digital Strategy 2025–2027—the project unifies services, data, and operational systems across multiple government sectors. Under DGE's stewardship, TAMM AI Assistant provides a streamlined, user-centric platform that allows residents, businesses, and visitors to access a wide range of government services through a single, cohesive interface, regardless of the originating department.

On the private sector front, Microsoft has served as a key strategic technology partner. Its support has been instrumental in designing and deploying TAMM AI Assistant's enterprise-grade architecture, ensuring ethical AI implementation, and enabling real-time system monitoring. Microsoft has also collaborated closely with DGE to uphold strict data sovereignty and privacy requirements in line with Abu Dhabi's governance standards. This successful partnership has garnered international recognition, with TAMM AI Assistant being featured in Microsoft's global showcases, including high-profile events such as the World Economic Forum's Annual Meeting in Davos.

This comprehensive public-private partnership has enabled TAMM AI Assistant to scale responsibly and efficiently, positioning it as a leading global example of the ethical and inclusive application of artificial intelligence in public sector service delivery.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms serve as powerful catalysts for international cooperation, offering governments a unique opportunity to benchmark their progress, share lessons learned, and collectively accelerate the journey toward inclusive digital transformation. These platforms not only promote innovation in the use of ICTs for development but also encourage cross-border dialogue and collaboration among diverse stakeholders.

For Abu Dhabi, participation in the WSIS process has provided important global validation for the TAMM AI Assistant as a model of responsible, AI-enabled governance. It has enabled us to connect with peers across the world, sparked interest in replication of our approach, and opened meaningful avenues for knowledge exchange with some of the most digitally advanced public administrations.

More than a recognition platform, WSIS offers a forum to shape and elevate global standards around ethical, human-centric, and technology-driven public service delivery. Abu Dhabi remains deeply committed to contributing to this global community and to sharing our insights on building scalable, secure, and inclusive digital government infrastructure that delivers real impact for people.

WSIS Action Line C7. ICT Applications: E-Business

From Weeks to Minutes: How Occidental Mindoro Revolutionized Business Permitting

Department of Information and Communications Technology - MIMAROPA Region

Republic of the Philippines

Basic Information about the Entity

The **Department of Information and Communications Technology (DICT) – MIMAROPA Region**, located in Batangas City, Philippines, is committed to serving the Filipino people by ensuring widespread access to vital ICT infrastructure and services. Its mission centers on fostering sustainable growth within the ICT-enabled industries, which contributes to job creation and economic development across the country. The department is focused on establishing a unified, digitized government that supports national progress and aligns with the broader goals of the administration. As a key enabler and innovator, DICT leads efforts to advance the Philippines toward a world-class digital economy, emphasizing inclusivity, innovation, and effective public service delivery.

Project's Description (Activities Description)

The **eLGU Business Permit and Licensing System (BPLS) – Occidental Mindoro** is a comprehensive digital platform developed to transform how local government units (LGUs) issue business permits and licenses. Designed to replace slow, manual, and error-prone procedures with a more efficient and transparent system, the BPLS simplifies the process of registering and maintaining businesses at the local level. It empowers LGUs with an internet-based platform that enables business owners to apply for permits online, upload and track necessary documents, and receive real-time updates on their application status. Crucially, the system is designed to be accessible even in geographically isolated or underserved areas through satellite internet, ensuring no community is left behind.

At the core of the BPLS are several key functionalities: automated fee computation, centralized databases for more consistent record management, and digital reporting tools that generate accurate and timely submissions to national agencies such as the Department of Trade and Industry (DTI), Department of the Interior and Local Government (DILG), and Philippine Statistics Authority (PSA). These features not only streamline local government workflows but also help standardize processes across municipalities, thereby improving accountability, consistency, and ease of use for both government employees and constituents.

The project is firmly aligned with Republic Act No. 11032, also known as the Ease of Doing Business and Efficient Government Service Delivery Act of 2018. By eliminating opportunities for under-the-table transactions and ensuring all applicants—regardless of size or influence—are treated fairly, the

system promotes trust in local institutions. Its digital-first approach removes bureaucratic bottlenecks and reduces the administrative burden on both businesses and LGUs, ultimately encouraging entrepreneurship and improving the local business climate.

Target beneficiaries of the eLGU BPLS include a wide spectrum of users. Small and medium enterprises (SMEs), in particular, stand to benefit from simplified procedures that remove barriers to entry and growth. LGUs themselves gain from increased revenue collection and improved efficiency in delivering services. Moreover, national government agencies receive more reliable data to guide planning, monitoring, and policy development. In the long term, the platform supports community development by ensuring more responsive, transparent, and accountable local governance.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The **eLGU Business Permit and Licensing System (BPLS) in Occidental Mindoro** demonstrates a strong alignment with the principles of the World Summit on the Information Society (WSIS), particularly **Action Line C7 on eBusiness**. By digitizing the traditionally manual, slow, and opaque process of issuing business permits, the system has significantly transformed how local government units (LGUs) engage with entrepreneurs and enterprises. The platform introduces efficiency, transparency, and fairness into the permitting process, enabling applicants to complete transactions online and access real-time updates—benefits previously unavailable to many, especially in remote areas.

This transformation directly contributes to multiple Sustainable Development Goals (SDGs). It supports **SDG 8 (Decent Work and Economic Growth)** by enabling more businesses to register legally, thereby stimulating job creation and local economic activity. It advances **SDG 9 (Industry, Innovation, and Infrastructure)** through the strategic use of ICT to modernize public services and reinforce digital infrastructure within LGUs. The system promotes inclusivity and equity, core to **SDG 10 (Reduced Inequalities)**, by providing equal access to business registration regardless of location or socioeconomic status. Additionally, by streamlining local business regulation and fostering a pro-growth environment, it contributes to **SDG 11 (Sustainable Cities and Communities).** Importantly, the platform enhances accountability and eliminates avenues for corruption, furthering **SDG 16 (Peace, Justice, and Strong Institutions)**. The project's success is rooted in multi-stakeholder collaboration among the Department of Information and Communications Technology (DICT), LGUs, and other national agencies, exemplifying **SDG 17 (Partnerships for the Goals)**.

In terms of the Global Digital Compact (GDC), the eLGU BPLS project exemplifies how digital technologies can be deployed inclusively and responsibly to benefit communities. It addresses the GDC's objective of **universal digital inclusion** by ensuring that even the most geographically isolated municipalities in Occidental Mindoro have access to the platform, with improvements in internet connectivity—often through satellite solutions—and ICT infrastructure. The system upholds core values of **safety, trust, and transparency** by protecting personal data, eliminating manual and potentially corrupt practices, and fostering public confidence in digital governance. Furthermore, it demonstrates how digital tools can be purposefully designed for the public good, improving access to essential services and supporting grassroots economic development.

The collaborative framework of this initiative—uniting national and local government agencies—reinforces the GDC's emphasis on digital cooperation and multi-stakeholder governance. Ultimately, the eLGU BPLS project stands as a practical, scalable example of how inclusive and ethical use of digital

technologies can drive meaningful change in local communities and contribute to broader development goals.

Social Economic and Environmental Impact of the Project

The eLGU Business Permit and Licensing System (BPLS) project has brought significant and measurable improvements across social, economic, cultural, and environmental dimensions. Socially, it has enhanced public trust in local government by introducing a process that is faster, more transparent, and equally applied to all. Previously, obtaining a business permit often took weeks and was prone to delays and unequal treatment. Today, in many municipalities, the same process can be completed within minutes, giving citizens greater confidence to start or continue their businesses knowing they will be treated fairly and efficiently.

Economically, the project has had a direct impact on increasing local government revenues and stimulating entrepreneurial growth. In the municipality of Sablayan, for example, the number of registered businesses grew by over 46% between 2022 and 2024, while income from business permits nearly doubled. This increase in revenue enables LGUs to invest more in essential public services and infrastructure, creating a positive feedback loop that benefits the entire community.

Culturally, the initiative has demonstrated that even in rural areas, communities can successfully transition to digital systems. Local government staff and business owners embraced the platform, gaining new digital skills and showing openness to technology-driven governance. This shift has helped transform public perception of government services, proving that they can be modern, accessible, and citizen-focused.

From an environmental standpoint, the digitization of business permit processes has significantly reduced paper usage by eliminating the need for printed forms and physical documents. It has also minimized the need for repeated in-person visits to government offices, resulting in reduced fuel consumption and lower carbon emissions.

Highlights of the Project's Partnerships Activities

The success of the eLGU Business Permit and Licensing System (BPLS) project in Occidental Mindoro can be attributed to the strong and coordinated partnership among national government agencies and local government units (LGUs). Key collaborators included the Department of Trade and Industry (DTI), the Department of the Interior and Local Government (DILG), the Anti-Red Tape Authority (ARTA), and the LGUs across the province. Each partner played a critical role in ensuring the project's effectiveness and sustainability. The DTI supported efforts to promote local enterprise and enhance the ease of doing business, while DILG provided essential guidance to LGUs in complying with governance standards and implementing the necessary procedures. ARTA ensured adherence to Republic Act No. 11032, or the Ease of Doing Business and Efficient Government Service Delivery Act, by identifying and eliminating bureaucratic inefficiencies and reducing red tape.

At the local level, LGUs were instrumental in operationalizing the system on the ground. They enacted ordinances to institutionalize the platform, allocated resources to procure the required equipment, designated IT personnel, and conducted training sessions for staff and end users. Their hands-on commitment ensured the platform's accessibility and adoption within their communities. As a representative of the Department of Information and Communications Technology (DICT), I witnessed firsthand how inter-agency collaboration—from planning and capacity building to technical support—

was vital in addressing challenges and maintaining project momentum. The unified effort of all stakeholders led to the successful 100% adoption of the system across the province, even in geographically isolated or underserved areas. This partnership serves as a strong example of what can be achieved when national and local agencies work together with a shared vision—to bring meaningful, technology-driven reform to even the most remote communities.

Challenges and Projects Future Perspectives

Like many transformative initiatives, the implementation of the eLGU Business Permit and Licensing System (BPLS) in Occidental Mindoro faced a series of challenges, each of which contributed to strengthening the project over time. One of the initial barriers was the varying level of digital readiness across local government units (LGUs). Several municipalities lacked the necessary infrastructure, including computers, stable internet connections, and adequately trained IT personnel. In addition, some local leaders were hesitant to transition from traditional manual processes, expressing concerns about changes in operational control and the reliability of a digital system. In certain areas, delays in the passage of local ordinances needed to officially adopt the system further slowed implementation. Budget constraints also proved significant, as LGUs were required to invest in equipment, training programs, and improved connectivity to fully utilize the platform.

Despite these challenges, the project succeeded through a combination of national guidance, strong inter-agency cooperation, and dedicated local engagement. With continued support from the Department of Information and Communications Technology (DICT), along with the involvement of key national partners, each problem was addressed through collaborative planning and targeted interventions. The collective effort of stakeholders at every level ultimately led to 100% adoption of the system throughout the province, demonstrating the power of shared commitment and local ownership.

Looking forward, the project team envisions further enhancements to the eLGU BPLS system. Planned improvements include the integration of online payment options, real-time application status updates, and expanded connectivity with other government services. Additionally, work is underway to improve document handling and facilitate easier processing of amendments. The long-term goal is to scale the solution beyond Occidental Mindoro, enabling other provinces to achieve full digital transformation in business permit processing. The success of this initiative serves as a compelling example of how technology, when deployed strategically and inclusively, can modernize public service delivery and foster more transparent, efficient, and equitable local governance.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms are of immense value, particularly for local initiatives like the eLGU Business Permit and Licensing System (BPLS) in Occidental Mindoro, as they provide an opportunity to gain global visibility and recognition. Participation in the WSIS Prizes was not only a chance to present the project to an international audience but also a valuable learning experience. It offered insight into how ICT solutions are being used across the world to address diverse challenges and improve lives, inspiring new ideas and renewed optimism for what digital innovation can achieve at the local level.

Through WSIS, the project's reach has expanded significantly. More stakeholders—both nationally and internationally—have become aware of the impact of the eLGU BPLS initiative, and the team has had the opportunity to share its journey not only as a government-led program but as a replicable model of community-driven digital transformation. The platform also opened doors for meaningful connections with global professionals, organizations, and innovators, fostering a space for collaboration, knowledge exchange, and continuous improvement.

WSIS has proven to be far more than a recognition program—it is a catalyst for innovation, partnership, and inclusive progress. The recognition of the eLGU BPLS project has reaffirmed the importance of digital governance at the grassroots level and serves as motivation for other communities to embark on their own transformation journeys. It is a testament to what can be accomplished when technology is leveraged to serve people fairly, efficiently, and transparently.

WSIS Action Line C7. ICT Applications: E-Learning

Madrasati Learning Management System

Ministry of Education

Kingdom of Saudi Arabia

Basic Information about the Entity

The Madrasati Platform, developed by the Ministry of Education of the Kingdom of Saudi Arabia and headquartered in Riyadh, serves as a cornerstone of the nation's digital education transformation. Its mission is to create a standardized, interactive digital learning environment that ensures uninterrupted education for all students across the country. The platform empowers educators and administrators with advanced tools for content delivery, student performance monitoring, and effective communication, thereby enhancing the overall teaching and learning experience.

Madrasati is designed to bridge regional and socioeconomic gaps by offering high-quality, accessible e-learning solutions to students regardless of their location or background. It also supports the promotion of lifelong learning and the development of digital literacy skills, aligning closely with the Kingdom's Vision 2030 goals for a modern, knowledge-based society. Through this initiative, the Ministry of Education reinforces its commitment to inclusive, future-ready education for all.

Website: https://schools.madrasati.sa

Project's Description (Activities Description)

The Madrasati platform, developed by the Ministry of Education in the Kingdom of Saudi Arabia, is a dedicated Learning Management System (LMS) designed to support distance learning for students from grades 1 through 12. Since its inception, the platform has become a cornerstone of the national education system, reaching over 6 million students and engaging more than half a million teachers. It has received international recognition for its effectiveness, scalability, and commitment to inclusive education. Madrasati is built around the goal of delivering accessible, continuous learning through a blend of synchronous (live virtual classes) and asynchronous (self-paced) instruction, ensuring that educational progress continues uninterrupted regardless of circumstance.

The platform offers a range of key features that enhance both teaching and learning. Virtual classrooms allow educators to conduct live sessions and record lessons for students to review at their convenience. Integrated digital tools, including Microsoft Office 365, enable seamless collaboration between students, teachers, and parents. Madrasati also includes interactive learning components such as digital planners, quizzes, and assignment management features to foster student engagement and academic performance.

A significant aspect of Madrasati's design is its commitment to equitable access. To ensure that students in areas with limited internet connectivity are not left behind, the platform utilizes multiple

delivery channels, including YouTube and dedicated satellite TV broadcasts tailored to different grade levels. By leveraging diverse digital and media tools, Madrasati ensures that quality education is accessible to all, supporting the Ministry's vision of an inclusive, technologically advanced educational environment.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The Madrasati platform contributes significantly to the WSIS Action Line and advances several Sustainable Development Goals (SDGs) through its comprehensive approach to digital education.

Linkages to WSIS Action Lines:

- **Education and Knowledge Development:** Madrasati provides a broad range of online learning resources tailored for students at all academic levels. It facilitates integrated remote learning, improving educational accessibility in regions where traditional schooling is limited. The platform also supports interactive and self-directed learning with advanced digital tools.
- **ICT for Community Development:** By offering personalized and adaptable learning opportunities, Madrasati enhances societal well-being and promotes sustainable education that meets individual student needs.
- **Applications for E-Government:** Madrasati integrates advanced digital solutions within the national education system, aligned with Saudi Arabia's Vision 2030. It enables secure, transparent communication among educators, students, and parents, supporting the "education for all" agenda critical to sustainable development.
- **Knowledge and Information Access:** The platform ensures equitable access to vital educational materials and communication tools, such as message boards and online feedback, fostering fair and inclusive information sharing.

Contribution to the Sustainable Development Goals (SDGs):

- **Goal 4 – Quality Education:** Madrasati enhances quality education by providing extensive course materials and innovative digital tools that facilitate flexible, accessible learning and improved educational outcomes.
- **Goal 9 – Industry, Innovation, and Infrastructure:** The platform offers advanced digital infrastructure for distance learning, incorporating smart classrooms and engagement tools to prepare students for future technological challenges.
- **Goal 10 – Reduced Inequalities:** Madrasati guarantees equitable education access regardless of socioeconomic status or geography, including specialized support for students with disabilities and underserved communities.
- **Goal 12 – Responsible Consumption and Production:** By minimizing paper use and promoting environmental awareness through educational initiatives, Madrasati encourages sustainable consumption and production habits.
- **Goal 13 – Climate Action:** The platform reduces carbon emissions by supporting remote learning, thus decreasing the need for daily commuting to physical schools.

Support for the Global Digital Compact (GDC) Objectives:

- **Closing the Digital Divide:** Madrasati is freely accessible to all students in Saudi Arabia and partners with the Ministry of Communications and STC to provide zero-rated broadband connectivity in remote areas, ensuring equal access to live lessons and interactive content.

- **Expanding Inclusion:** The platform promotes female participation in digital learning through targeted outreach and support, particularly in rural areas where cultural barriers exist. It highlights girls' educational success and supports women-led study groups.
- **Fostering a Safe, Digital Space:** Madrasati adheres to strict cybersecurity and data protection standards, including multi-factor authentication via the Absher e-ID system, role-based access controls, and end-to-end encryption. It also offers digital citizenship education promoting responsible online behavior.
- **Advancing Responsible, Interoperable Data Governance:** The platform integrates seamlessly with national systems such as e-ID, SIS (Noor), and ERP/HR, following government data-sharing protocols and metadata standards to ensure secure, compliant data management.
- **Enhancing International Governance of AI:** Madrasati plans to develop an ethical framework for future AI and adaptive learning technologies, including bias mitigation, transparent documentation, and compliance with ITU and ISO standards. Participation in global forums such as the ITU "AI for Good" Summit will guide these efforts.

Through these contributions, Madrasati exemplifies how digital platforms can effectively combine education and technology to foster sustainable, inclusive learning environments aligned with WSIS principles, the SDGs, and the Global Digital Compact.

Social Economic and Environmental Impact of the Project

The Madrasati platform has generated significant social, economic, cultural, and environmental impacts with measurable outcomes.

Social Impact: Serving over 6 million daily users—including students, educators, and parents, across urban and rural areas, Madrasati ensures continuity of learning with 27 million lessons delivered and 4.5 million assignments completed. The platform fosters increased family engagement through real-time progress updates. Attendance and participation rates have surpassed pre-pandemic levels, while both teachers and students have enhanced their digital competencies.

Economic Impact: The shift to digital education has resulted in annual savings of SAR 150 million for the Ministry by reducing printing and distribution expenses. Additionally, the platform has decreased teachers' grading time by an average of two hours per week. Madrasati attracts over 100 million peak-hour visits, encouraging self-directed learning, which in turn reduces reliance on costly private tutoring and contributes to the growth of Saudi Arabia's EdTech sector.

Cultural Impact: Madrasati plays a vital role in preserving national heritage and fostering social unity by offering an extensive collection of culturally rich, locally produced video lessons. It promotes regional interaction through virtual exchanges and serves as a unified collaborative space for Saudi educators to create and share localized educational content.

Environmental Impact: The platform's digital delivery has significantly reduced environmental strain by saving over 1.54 million trees from being cut, eliminating 34 million kilograms of solid waste, conserving 451 GWh of energy, saving 5.18 billion litres of water, and preventing 284 million cubic meters of CO_2 emissions by minimizing travel and facility operations. These outcomes directly contribute to the sustainability objectives outlined in Saudi Arabia's Vision 2030.

Highlights of the Project's Partnerships Activities

The successful implementation of the Madrasati platform is the result of strong collaboration among key partners. The Ministry of Communications and Saudi Telecom Company (STC) have worked together to provide zero-rated broadband and mobile connectivity, ensuring access for rural and underserved communities. The Ministry of Interior and the Saudi Data and AI Authority (SDAIA) have integrated Madrasati's authentication system with the national e-ID platform, Absher, to guarantee secure and reliable verification of students and parents. The Tatweer Educational Technology Company, a private sector partner, serves as the lead developer and system integrator, managing custom software engineering, platform deployment, and ongoing feature enhancements. Additionally, Microsoft, as the Azure hosting partner, provides essential cloud infrastructure services—including compute credits, managed databases, and a global content delivery network—to ensure the platform's reliability, scalability, and performance.

Challenges and Projects Future Perspectives

Several challenges were encountered during the implementation of the Madrasati platform. In remote desert regions, unstable and weak internet connectivity required the identification and deployment of alternative solutions to maintain consistent access for students, teachers, and the platform itself. Change management presented another hurdle, as some teachers were initially hesitant to adopt digital tools; this was effectively addressed through the introduction of regional "digital champions" and peer coaching initiatives. Content localization also demanded significant effort, ensuring that high-quality bilingual (Arabic and English) resources were available across all disciplines through close collaboration with curriculum developers. Additionally, concerns regarding data privacy were raised by parents and educators; these were mitigated by implementing transparent data policies and conducting regular quarterly privacy audits.

Looking ahead, the platform's next steps and ambitions include expanded integration of artificial intelligence, with plans to introduce adaptive learning engines that personalize educational content based on individual performance metrics. There are also ongoing efforts to extend regional partnerships, particularly by sharing the Madrasati model with Gulf Cooperation Council (GCC) countries through a structured knowledge-transfer program. Furthermore, an open-API ecosystem is being developed, including the launch of a dedicated developer portal to encourage third-party EdTech companies to contribute innovative tools and advanced analytics dashboards.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

Participation in the WSIS Stocktaking and Prizes has significantly enhanced the Madrasati platform and the broader Saudi education ecosystem. The application process prompted a comprehensive internal review of impact metrics, governance practices, and partnership frameworks, aligning them with international best practices. Furthermore, inclusion in the WSIS Success Stories Report has increased Madrasati's visibility, attracting attention from UNESCO offices, bilateral aid agencies, and EdTech investors. This recognition also serves as a powerful motivator for continuous improvement, inspiring teams to uphold increasingly rigorous standards in digital inclusion and educational effectiveness.

WSIS Action Line C7. ICT Applications: E-Health

A New Era in Zanzibar's Healthcare: The Game-Changing Role of Digital Unique IDs

PHARMACCESS

United Republic of Tanzania

Basic Information about the Entity

The Ministry of Health Zanzibar (MoH Zanzibar) serves as the government authority responsible for overseeing healthcare services throughout the Zanzibar archipelago. It plays a pivotal role in developing health policies, managing public health systems, and coordinating with various stakeholders to enhance health outcomes. As part of its commitment to achieving Universal Health Coverage (UHC), MoH Zanzibar has led the strategic adoption of digital health initiatives, including the implementation of the Matibabu Card and the integration of electronic medical records (EMRs).

PharmAccess is an international non-profit organization focused on improving healthcare access across Africa by strengthening health systems through digital innovation, quality improvement, and health financing solutions. In Zanzibar, PharmAccess has been a key partner in co-developing and implementing the digital health ecosystem, which encompasses the Matibabu Card, digital claims processing, and healthcare quality enhancement via the SafeCare program.

Project's Description (Activities Description)

Zanzibar is advancing a major healthcare financing reform by transitioning from free services to a sustainable Social Health Insurance (SHI) model. Central to this transformation is the **Kadi ya Matibabu**, a digital health card that uniquely identifies citizens and links them with healthcare facilities. This innovation enables real-time tracking of service usage and costs, embedding a unique ID to enhance transparency, streamline operations, and support data-driven decision-making in financing health care. With 92% of the population enrolled—approximately 1.74 million people—the Kadi ya Matibabu is fully integrated into the national Matibabu Information System and interconnects with all Ministry of Health (MoH) electronic medical record (EMR) systems. This foundation empowers policymakers to allocate resources equitably, deliver evidence-based strategies, and accelerate progress toward Universal Health Coverage (UHC).

In collaboration with MoH Zanzibar, **PharmAccess** co-developed a digital quality-improvement initiative grounded in **SafeCare** principles, rolled out across 268 health facilities in all 11 districts. The system provides access to digital Quality Improvement Plans (QIPs), a centralized knowledge library, and benchmarking tools to monitor performance improvements over time.

Key components of the initiative include:

- **Digital Health Identity (Kadi ya Matibabu):** Biometrically linked card serving 92% of the population; fully integrated into Zanzibar's EMR systems.
- **Health Financing & Insurance Infrastructure:** Enacted Health Insurance Bill in 2023, establishment of the Zanzibar Health Services Fund (ZHSF) to pool resources, a Health Equity Fund (HEF) to subsidize vulnerable groups, mandatory tourist travel insurance supporting the HEF, and a customized openIMIS platform tailored to local needs.
- **Digital Quality Improvement System:** SafeCare-based framework offering QIPs, benchmarking dashboards, and real-time facility performance monitoring.
- **Data Interoperability & Infrastructure:** Development of the Zanzibar Health Interoperability Layer (ZHIL) to enable secure data exchange between EMRs and financing systems; community health tools integrated via the Jamii ni Afya mobile app.

This integrated system aims to link health and socioeconomic data for integrated planning, improve real-time budgeting via accurate utilization data, ensure claim transparency and fraud prevention, and elevate healthcare quality by empowering institutions with actionable analytics. Target beneficiaries include low-income and vulnerable populations supported through HEF, rural and remote communities accessing enhanced digital services, women, children, older adults, and persons with disabilities through targeted interventions, health providers and policymakers using data for system improvements, and community health workers equipped with new digital tools and inclusion in formal service delivery structures.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The Zanzibar Digital Health Initiative makes a significant contribution to **WSIS Action Line C7: ICT Applications – E-health** by integrating digital technologies across the healthcare system to enhance access, efficiency, and the overall quality of care. Central to this initiative is the **Matibabu Card**, a digital health identity linked to electronic medical records (EMRs) at all levels of care. This system enables real-time patient verification, mobile claims processing, and cashless access to health services. The card is fully interoperable with national systems via the **Zanzibar Health Interoperability Layer (ZHIL)**, ensuring seamless data exchange and integration. Through the use of biometric authentication, digital dashboards, and mobile payment functionalities, the initiative enhances transparency, combats fraud, and streamlines both health financing and service delivery. Additionally, community health workers are empowered with mobile tools that allow them to register households and monitor services, extending the reach of e-health services into rural and underserved communities.

The initiative directly supports several **Sustainable Development Goals (SDGs)**:

- **SDG 3: Good Health and Well-Being** – by improving access to healthcare and reducing out-of-pocket expenses through mechanisms such as the **Zanzibar Health Services Fund (ZHSF)** and the **Health Equity Fund**.
- **SDG 9: Industry, Innovation, and Infrastructure** – by building a scalable and interoperable digital health infrastructure that connects over 180 health facilities across the archipelago.
- **SDG 10: Reduced Inequality** – by ensuring inclusive access to healthcare for vulnerable and underserved populations through biometric identification and targeted subsidies.
- **SDG 17: Partnerships for the Goals** – by fostering strong collaborations among key stakeholders, including the Ministry of Health Zanzibar, PharmAccess, UNICEF, NORAD, and other technical and development partners, to ensure both sustainability and scalability.

The initiative also aligns closely with the principles of the **Global Digital Compact (GDC)**:

- **Closing the Digital Divide** – by registering 92% of the population in a unified digital health system, linked through a secure, interoperable platform.
- **Expanding Inclusion** – through biometric-based registration and the provision of subsidized insurance coverage for vulnerable groups via the Health Equity Fund.
- **Fostering a Safe Digital Space** – by implementing secure, fraud-resistant claims systems tied to biometric verification.
- **Responsible, Interoperable Data Governance** – by integrating real-time dashboards and connecting identity, health, and financial data streams to support data-informed planning and policymaking.
- **Future Readiness for AI Integration** – while not currently focused on artificial intelligence, the initiative's robust data architecture establishes a solid foundation for future AI-driven innovations in health system management and planning.

Together, these efforts demonstrate how digital health solutions can drive equitable, transparent, and efficient healthcare delivery in line with WSIS priorities, the SDGs, and GDC objectives.

Social Economic and Environmental Impact of the Project

The Zanzibar digital health initiative has brought about measurable improvements across economic, social, and environmental dimensions. By leveraging interoperable digital tools and inclusive health financing models, the project is contributing to a more resilient, equitable, and efficient healthcare system aligned with the goals of Universal Health Coverage (UHC) and sustainable development.

Economic Impact: The digitization of healthcare services has significantly enhanced operational efficiency. The adoption of electronic medical records and system-wide data interoperability has reduced administrative burdens, improved workflow, and enabled real-time insights into healthcare utilization and expenditure. With 15% of the population already enrolled in the Zanzibar Health Services Fund (ZHSF), the program is reducing financial barriers to care and providing individuals and the government with more predictable healthcare spending. Data-driven planning further supports optimal allocation of financial and medical resources, ensuring they reach the areas of greatest need.

Social Impact: The initiative has also led to notable social gains. The implementation of the SafeCare digital quality improvement system has resulted in a 13% improvement in service delivery, ensuring safer and more effective patient care. Vulnerable and underserved populations—including women, rural residents, and low-income households—now have greater access to healthcare services closer to their communities. Community health workers (CHWs) have been equipped with digital tools that facilitate timely patient registration, follow-up care, and improved health education, strengthening community-based care delivery and increasing health system responsiveness.

Environmental Impact: While long-term in nature, the environmental benefits of the digital transformation are already taking shape. The transition away from paper-based processes has led to reductions in paper consumption and waste. Enhanced supply chain management, driven by real-time data, is minimizing medical waste and promoting efficient resource use. Additionally, by reducing the need for frequent travel to centralized facilities, the system is helping to lower fuel consumption and emissions—contributing to a more sustainable healthcare model over time.

Highlights of the Project's Partnerships Activities

The success of Zanzibar's digital health transformation is rooted in strong multi-sectoral collaboration. Several key partners have played pivotal roles in advancing the initiative, each bringing specific expertise and resources that collectively support the system's design, implementation, and sustainability.

International Organizations: NORAD and UNICEF.

The Norwegian Agency for Development Cooperation (NORAD), along with UNICEF, has been instrumental in strengthening Zanzibar's digital health infrastructure. Through financial and technical assistance, NORAD enabled the deployment of real-time data collection and analytics systems, which played a key role in the development and eventual passage of the Health Insurance Bill in April 2023. Their support also facilitated the integration of non-communicable diseases (NCDs) into the national health insurance benefit package. Data analytics platforms funded by NORAD support predictive modeling of NCD prevalence, enhancing resource allocation and enabling evidence-based policymaking. These systems integrate patient-level data with financial modeling tools to support equitable coverage and improve policy targeting.

Health Sector Bodies: Zanzibar Health Services Fund (ZHSF), PharmAccess, and SafeCare

Established by legislation in 2023, the Zanzibar Health Services Fund (ZHSF) launched the Health Equity Fund (HEF), a targeted subsidy mechanism for vulnerable populations. This system utilizes digital registration and biometric verification to ensure accurate identification of eligible individuals, prevent fraud, and streamline claims processing.

PharmAccess has served as a key implementation partner, driving digital innovation in health financing and service delivery. Notable contributions include:

- **Matibabu Card**: A digital health insurance ID that supports real-time verification, claims processing, and cashless service access.
- **Healthcare Utilization Dashboard**: A live data visualization tool that tracks healthcare usage, financing flows, and quality indicators to guide evidence-based decisions.
- **Mobile Payments and Digital Claims Processing**: Integration of mobile payment systems has enabled instant premium collection and provider reimbursements, while also improving fraud detection through digital tracking.

SafeCare complements these efforts by offering a digital quality assurance framework that supports facility self-assessments, progress tracking, and healthcare accreditation.

Government Institutions: Ministry of Health Zanzibar, Ministry of Finance, and MoCDGEC

The Ministry of Health Zanzibar leads the overall coordination and execution of digital health strategies. It has adopted electronic medical records (EMR) systems across public facilities to ensure standardized patient data collection, a critical foundation for system integration.

The Ministry of Finance plays a central role in ensuring sustainable financing for health initiatives. Through budget planning, resource mobilization, and fiscal oversight, it ensures that the health reforms are backed by robust financial mechanisms.

The Ministry of Community Development, Gender, Elderly, and Children (MoCDGEC) ensures the alignment of health policies with broader social welfare objectives. Their involvement ensures that the digital health system responds to the needs of marginalized groups, including women, children, the elderly, and persons with disabilities, by integrating health initiatives into broader social protection programs.

Challenges and Projects Future Perspectives

Challenges and Future Outlook

Enrolling informal sector workers remains a significant challenge, as many lack stable incomes and often harbor mistrust towards insurance schemes, complicating their inclusion in social health insurance programs. Additionally, the underutilization of digital technologies persists, with some healthcare facilities slow to adopt and fully integrate digital systems due to limited digital literacy and resistance to change.

Baseline quality gaps in public healthcare services also present obstacles, as many facilities required substantial improvements in infrastructure and staff training prior to digitalization. Furthermore, infrastructure limitations—such as unreliable internet connectivity, frequent electricity shortages, and limited digital literacy—have hindered smooth implementation in certain regions.

Concerns regarding data security and privacy necessitate the strengthening of cybersecurity policies and regulatory frameworks to protect patient information adequately. Financial sustainability poses another critical challenge; the long-term success of the initiative depends on securing sufficient funding to support system maintenance, software updates, and continuous healthcare provider training.

Looking ahead, the project is committed to addressing these challenges through strategic measures. Plans include scaling the Health Equity Fund (HEF) and increasing domestic health financing to reduce reliance on donor support. Expanding the role of Community Health Workers (CHWs) in digital enrollment efforts will enhance outreach and inclusion. Furthermore, linking the Matibabu Card with national ID systems and birth records is prioritized to improve data accuracy and system integration. Ongoing collaboration with development partners will be vital to ensuring the sustainability and continual evolution of Zanzibar's digital health infrastructure.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

Participation in the WSIS Stocktaking and WSIS Prizes has greatly enhanced Zanzibar's international visibility and recognition in the field of digital health. These platforms serve as catalysts for global networking, facilitating partnerships with stakeholders who share a commitment to advancing digital health solutions. They also promote valuable cross-learning by linking Zanzibar's experiences with similar initiatives worldwide, enabling the exchange and adoption of best practices, particularly within low- and middle-income countries. This heightened exposure positions Zanzibar as a regional leader in digital health, attracting the attention of donors, policymakers, and technology partners, while providing opportunities to influence international policy discussions and innovation agendas.

WSIS Action Line C7. ICT Applications: E-Employment

Graduates Employment Ranking

Ministry of Labour and Social Protection of Population

Republic of Azerbaijan

Basic Information about the Entity

The **Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan** is a government institution responsible for developing and implementing policies related to labour, employment, and social protection. Located in Baku, the Ministry plays a central role in promoting inclusive access to decent work, fostering social justice, and enhancing the quality of life for citizens.

Guided by its mission, the Ministry is committed to creating effective and innovative solutions—particularly through digital transformation—to ensure comprehensive social support and fair labour practices across the country.

For more information, please visit the official website: https://www.sosial.gov.az/en

Project's Description (Activities Description)

The **"Graduates Employment Ranking"** platform, developed by the **Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan**, is a strategic digital tool designed to expand employment opportunities for university applicants and recent graduates. By offering detailed, data-driven insights into the employment outcomes of graduates, the platform supports informed decision-making in educational and career planning.

Covering 104,567 graduates from 30 universities across 373 specialties, the platform analyzes five years of employment data, highlighting key indicators such as job security, employer characteristics, salary levels, and labour market demand by specialty. It offers a transparent and evidence-based overview of how graduates are integrated into the workforce, helping future students choose institutions and study fields with stronger employment prospects.

The platform strengthens competition among universities, incentivizes them to improve education quality, and encourages students to develop skills that are aligned with labour market demands. It also supports national efforts in higher education admission planning, including the setting of university quotas based on real employment outcomes.

The platform's analytical framework is based on 22 variables, grouped into four main categories:

- **Demographic Characteristics (3 variables):** These variables examine gender, age, and other personal data to assess the diversity and inclusiveness of the graduate population.

- **Education (6 variables):** This set focuses on academic background, including the university attended, field of study, and performance metrics, to evaluate educational quality and relevance to market needs.
- **Employment Activities (13 variables):** These provide comprehensive information on post-graduation employment, including job roles, industries, salaries, duration of employment, and alignment with acquired qualifications.
- **Employer Characteristics (3 variables):** These indicators offer insight into the nature of employers—public vs. private sector—and identify the industries with the highest graduate absorption rates.

By bringing transparency to the relationship between higher education and employment, the "Graduates Employment Ranking" platform serves as a valuable tool for students, educators, and policymakers alike. It ensures better alignment between academic programs and labour market needs, ultimately contributing to a more skilled, competitive, and future-ready workforce.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The **"Graduates Employment Ranking"** platform developed by the **Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan** contributes directly to several **WSIS Action Lines**, particularly **Action Line C7: ICT Applications – E-employment**. By harnessing the power of ICTs, the platform facilitates digital access to labor market information, connecting graduates with employment opportunities and improving the overall efficiency of job matching.

The platform promotes equal access to valuable data on employment outcomes, university rankings, and labor market trends. This inclusive approach enables all students—regardless of socioeconomic background—to make informed decisions about their educational paths and improve their employment prospects, in line with **WSIS Action Line C3: Access to Information** and **Action Line C4: Capacity Building**.

It strengthens the relevance of educational programs by offering insights into which specialties and institutions yield better employment outcomes, thereby supporting **Action Line C2: Information and Communication Infrastructure** and fostering data-driven collaboration between education systems and the labor market.

In terms of the **Sustainable Development Goals (SDGs)**, the platform advances several key objectives:

- **SDG 4 (Quality Education):** By aligning academic offerings with market demand, the platform supports improved educational outcomes and relevance.
- **SDG 8 (Decent Work and Economic Growth):** It helps young people find employment that matches their qualifications, contributing to sustainable economic growth and a skilled workforce.
- **SDG 10 (Reduced Inequalities):** Through open access to information, the platform reduces disparities in career planning and employment outcomes.
- **SDG 17 (Partnerships for the Goals):** It fosters cooperation between universities, employers, and government bodies, reinforcing institutional linkages that drive inclusive development.

The **"Graduates Employment Ranking"** platform fully supports the vision of the **Global Digital Compact (GDC)** by promoting equitable access to trusted, digital public services that serve the public good.

By providing transparent, government-verified labor market data, the platform fosters **digital trust** and **transparency**, ensuring that students and families can rely on accurate information when making critical educational and career decisions. It advances **digital inclusion** by making insights available to all users, regardless of their background, thus contributing to **bridging the digital divide**.

Aligned with **human rights principles**, the platform empowers individuals with informed access to education and work, supporting the right to decent employment. Its **human-centered design**, shaped through collaboration between government agencies, educational institutions, and employers, ensures that the platform responds to real-world needs and promotes the **public interest**.

Furthermore, as a publicly accessible digital tool, it strengthens **digital public infrastructure** and encourages **cross-sector collaboration**, making it a valuable example of how digital innovation can advance **open, inclusive, and accountable societies**—core goals of the Global Digital Compact.

Social Economic and Environmental Impact of the Project

The **"Graduates Employment Ranking"** platform, developed by the **Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan**, delivers significant and measurable impacts across social, economic, cultural, and environmental dimensions.

Social Impact

At the societal level, the platform empowers prospective students and graduates to make informed, data-driven decisions about their educational and professional futures. By providing objective information on employment outcomes, specialty relevance, and job market trends, the platform:

- Enables graduates to evaluate the real-world value of their chosen specialties.
- Eliminates the need for individuals to conduct additional research on labor market trends, democratizing access to vital employment information.
- Offers job seekers a clear understanding of employment opportunities, qualifications required, and industry demand, enhancing the efficiency and transparency of the application process.

The platform also supports public policy and education governance by offering critical data for more strategic admission planning and quota setting. Institutions such as the Ministry of Science and Education can use these insights to ensure higher education programs are aligned with national labor market needs and long-term societal goals.

Economic Impact

Economically, the platform improves workforce planning and reduces skill mismatches by providing detailed insights into graduate employment outcomes across 31 universities, 373 specialties, and 104,567 graduates over a two-year period. This helps:

- Optimize the allocation of educational resources.

- Improve graduate employability.
- Support sustained national productivity and economic growth by aligning education outputs with market demand.

Employers also benefit from access to a more accurately prepared talent pool, while government agencies can shape workforce development policies based on reliable data.

Cultural Impact

Culturally, the platform promotes a shift toward evidence-based decision-making among students, families, educational institutions, and policymakers. By fostering a culture of transparency, accountability, and impact in higher education, it:

- Enhances the role of universities as key drivers of national development.
- Encourages students to pursue career paths aligned not only with personal interest but also with national needs.
- Builds public trust in education and employment systems by delivering reliable, government-verified information.

Environmental Impact

From an environmental standpoint, the platform contributes to sustainability by digitizing what were traditionally paper-based or in-person administrative processes. This:

- Reduces paper consumption and travel-related emissions.
- Minimizes bureaucratic burdens.
- Modernizes public service delivery in alignment with digital and ecological transformation goals.

Highlights of the Project's Partnerships Activities

The project is carried out through close collaboration between the Ministry of Labour and Social Protection of Population, the State Employment Agency, the Ministry of Science and Education, and 31 higher education institutions. These include the Academy of Public Administration under the President of the Republic of Azerbaijan, Azerbaijan Technical University, Baku Engineering University, National Aviation Academy, Baku Higher Oil School, among others.

Graduate data from other universities will be added to the platform in the near future, expanding its scope and impact.

Challenges and Projects Future Perspectives

A key challenge faced by the project is ensuring the consistent and accurate collection of data from universities and employers. Maintaining the quality and reliability of this data is essential, as any inconsistencies could affect the platform's ability to provide meaningful insights for students, institutions, and policymakers.

Looking ahead, the platform aims to expand its scope by incorporating data from additional universities, a wider range of specialties, and more employment-related information. These efforts will strengthen the platform's analytical capacity and enhance its usefulness.

To further improve its impact, the platform plans to integrate AI elements to: Forecast employment trends and salary expectations; Provide personalized career recommendations based on individual profiles; and automate and enhance data analysis to uncover deeper insights.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

Participation in the WSIS platform has increased the visibility of the project and created opportunities for international recognition, cross-border cooperation, and knowledge exchange. The recognition reinforces Azerbaijan's commitment to digital innovation in education and governance, and encourages continued efforts toward inclusive, data-driven public services.

WSIS Action Line C7. ICT Applications: E-Environment

Rapid, accurate and secure production, dissemination and communication of early warning for meteorological disaster

China Academy of Information and Communications Technology

People's Republic of China

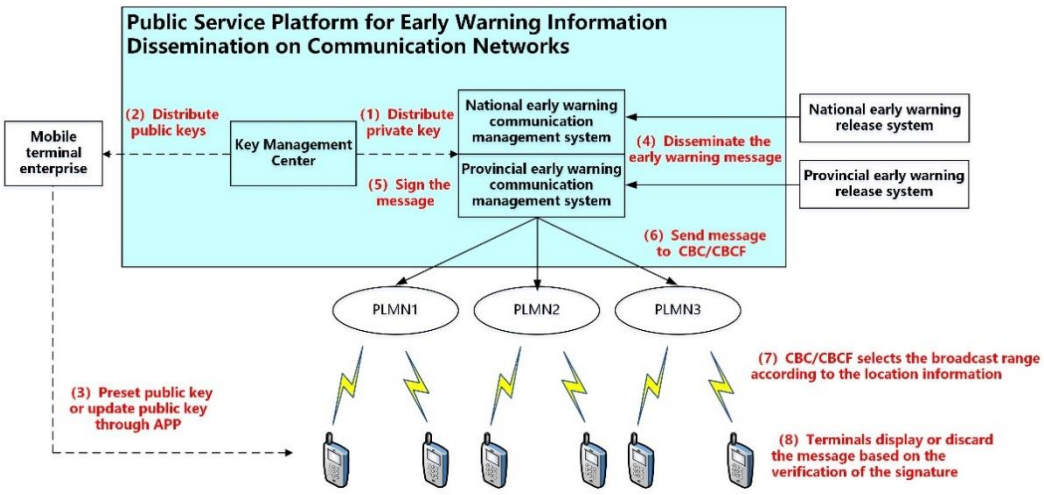
Basic Information about the Entity

The **China Academy of Information and Communications Technology (CAICT)** is a leading scientific research institution headquartered in **Beijing** and directly administered by **China's Ministry of Industry and Information Technology (MIIT)**. CAICT acts as a national think tank and strategic enabler for innovation and development in the information society. It serves both as a policy advisory body for the government and as an integrated innovation platform supporting the advancement of industry.

For more information, please visit: www.caict.ac.cn/english

Project's Description (Activities Description)

This project focuses on the development of an **early warning system for meteorological disasters**, emphasizing the **production, dissemination planning, and communication** of warnings. It directly supports the **United Nations Early Warning for All Executive Action Plan**, aiming to enhance disaster forecasting and improve the effectiveness of warning dissemination.



- **Early Warning Production:** The project established **impact-based early warning models** for heavy rain and snow events affecting **roads, scenic areas, cities, and agricultural facilities**. These models allow for the rapid and accurate generation of warning messages that are clear, actionable, and accessible to the public.
- **Dissemination Planning:** To ensure warnings effectively reach both **emergency responders and the general public**, the project created **matching schemes** that align dissemination needs with appropriate **communication network channels**, tailored to various real-world scenarios.

- **Message Communications:** The project developed and implemented key technologies such as **5G Cell-Broadcast (CB)** and **Digital Signatures (DS)**, and established a **Cell Broadcast Center**. These innovations greatly enhance the **speed, accuracy, and security** of warning message delivery.

Through **cross-sector collaboration** between communication and meteorological authorities, the system now produces **more effective and timely warnings**, significantly improving disaster response capabilities. The results of this project have contributed to the **formulation of national policies**, defined the development path for the national early warning communication system, and are currently being **integrated into the national emergency early warning system (EWS)**, with **ongoing adaptation for broader use** in various disaster scenarios.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

This project is closely aligned with **WSIS Action Line C7** (e-environment) and contributes directly to **Sustainable Development Goals 13** (Climate Action) and **11** (Sustainable Cities and Communities). By enhancing early warning capabilities through the use of ICTs, it addresses the urgent need to combat the impacts of climate change and improve disaster resilience. The project supports the UN's Early Warnings for All Executive Action Plan (2023–2027), which aims to provide early warning services to every person worldwide within five years.

Leveraging digital technologies and fostering cooperation between meteorological and ICT sectors, the project improves the production, dissemination, and communication of warnings, ensuring environmental information is shared effectively. It strengthens national capacity to issue impact-based, customized early warnings, enabling faster and more targeted responses that prioritize vulnerable groups such as the elderly, children, women, and persons with disabilities. This directly supports climate resilience and risk reduction efforts under SDG 13.

Additionally, the project enhances the safety and sustainability of cities and communities by using advanced communication tools like 5G cell broadcast, satellite networks, and digital signature technology to deliver timely and secure alerts across urban, rural, and maritime areas. These measures help build inclusive, resilient, and sustainable societies as envisioned by SDG 11. The scalable nature of the project's outcomes further contributes to global efforts in disaster risk reduction and environmentally sustainable development.

Social Economic and Environmental Impact of the Project

This project delivers significant social, economic, and environmental benefits by enhancing early warning production, dissemination, and communication for critical sectors such as roads, urban areas, scenic spots, and agriculture. It targets severe weather events like heavy rainfall, typhoons, ice and snow, and thunderstorms, dramatically improving warning speed to second-level dissemination times and geographic precision down to the kilometre scale, all while ensuring information security.

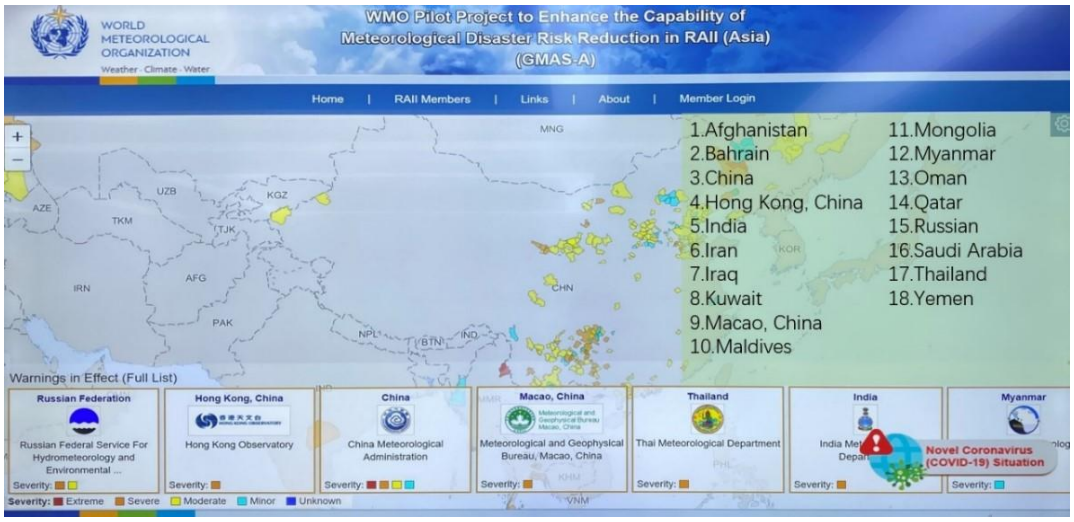
Socially, the project increases the accuracy and geographic targeting of warnings, reducing false alerts to populations outside risk zones and helping to prevent the spread of unverified information. By strengthening climate resilience, it supports saving lives, maintaining social stability, modernizing early warning systems, and advancing the transition toward eco-friendly societies in China and beyond.

Economically, the project helps cut disaster-related losses by providing earlier warnings that allow governments and communities more time to prepare. Prioritizing Cell Broadcast infrastructure as the most effective communication channel optimizes costs by reducing redundant dissemination methods. Additionally, the development of early warning models and products fosters industry growth by encouraging enterprises to adopt advanced warning technologies, thereby improving their disaster preparedness and resilience.

From an environmental and broader perspective, the project stimulates research and development across the entire industry chain, engaging telecom carriers, system vendors, and manufacturers through demand analysis, technical workshops, standards development, and joint testing. It notably achieved China's first end-to-end 5G Cell Broadcast test on a trial network in 2021. The project also informs national policy by providing technical standards and data that guided the creation of China's national 5G Cell Broadcast and Digital Signature warning system. Its innovations have been recognized and showcased at major events, including the Ministry of Science and Technology's 13th Five-Year Plan Sci-Tech Achievement Exhibition, the Yangtze River Delta Emergency Expo, and national training sessions by the China Meteorological Administration.

Highlights of the Project's Partnerships Activities

A key highlight of the project's partnership activities is the close collaboration with the China Meteorological Administration Public Meteorological Service Center (CMA-PMSC). As a vital partner, CMA-PMSC is responsible for sector-specific disaster monitoring, generating critical information, and providing disaster prevention guidance alongside global meteorological support. The center plays a central role in aggregating and issuing early warnings across all administrative levels—from national to county—ensuring comprehensive coverage. This strong partnership fosters effective cross-sector collaboration between telecommunications and meteorology, aligning early warning requirements with communication channel capabilities, which systematically enhances the overall effectiveness and reliability of the warning system.



Challenges and Projects Future Perspectives

The project faces several challenges, primarily related to the quality and relevance of warning content. Since meteorological monitoring and forecasting are the foundation of warning production, integrating diverse monitoring data and optimizing warning models remains complex and requires

significant improvement to enhance the accuracy and usefulness of early warning messages. Another key challenge is establishing secure and effective dissemination channels. Past experiences with spam messages have slowed the national adoption of Cell Broadcast (CB) technology, creating an urgent need to deploy a secure, nationwide CB system.

Looking ahead, the project aims to enhance the Early Warning System (EWS) to ensure that at-risk populations receive timely warnings accompanied by clear protective guidance, supported by growing societal attention to public warning systems. Plans include leveraging big data and artificial intelligence to improve meteorological monitoring and forecasting, continuously refining forecast accuracy and warning models. The project will also focus on building a nationwide 5G Cell Broadcast system integrated with digital signature technology, enabling near real-time alerts with kilometer-level geographic precision and strong security against spam. This system is designed to be future-proof, allowing expansion to 6G networks to maintain cutting-edge communication capabilities. Additionally, efforts will be made to formulate standards and interactive protocols that allow seamless integration between dissemination channels and the national EWS. Diverse communication channels will be developed to meet the needs of different user groups, establishing a comprehensive, standardized warning mechanism that ensures timely, accurate, and consistent message delivery across the country.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Prizes represent a leading global platform that highlights and celebrates successful projects implementing WSIS Action Lines and advancing the Sustainable Development Goals. This initiative offers an effective way to evaluate and recognize efforts that use information and communication technologies to drive sustainable development. Complementing this, the WSIS Stocktaking process maintains the world's largest database of ICT-for-development initiatives, ensuring that projects are aligned with relevant SDGs. Together, these platforms play a crucial role in promoting international development by fostering knowledge sharing, encouraging best practices, and increasing the visibility of impactful ICT projects worldwide.

WSIS Action Line C7. ICT Applications: E-Agriculture

Agricultural Market Information System

Ministry of Agriculture and Livestock

Kingdom of Bhutan

Basic Information about the Entity

The Ministry of Agriculture and Livestock (MoAL) is responsible for facilitating the marketing of agricultural produce and supporting the development of the co-operative sector. Established in October 2009, the Ministry became a fully operational department in March 2010.

MoAL strives to be a leading institution in developing effective marketing systems for Renewable Natural Resources (RNR) and in promoting agribusiness, enterprises, and cooperatives to support sustainable socio-economic development.

To achieve this, the Ministry works to establish efficient and effective post-production and marketing systems. It also focuses on promoting and strengthening farmers' groups, cooperatives, and agribusiness ventures across the country.

Project's Description (Activities Description)

The Agricultural Marketing Information System (AMIS), developed by the Department of Agricultural Marketing and Cooperatives (DAMC) under the Ministry of Agriculture and Livestock, is a vital digital platform designed to empower Bhutanese farmers and small to medium-sized agricultural businesses.

AMIS aims to improve market access and profitability for producers by delivering real-time commodity price information directly to farmers across all Dzongkhags (districts) in Bhutan. These prices are collected from approximately 26 markets throughout the country, ensuring that producers have access to accurate and up-to-date data.

With this readily available price information, farmers are better equipped to make informed decisions, negotiate fairer prices for their produce, and ultimately enhance their incomes. In addition to real-time data, AMIS offers advanced tools such as a price analysis feature, enabling users to study market trends and customer behavior to identify opportunities for increased profitability.

This initiative not only builds on and expands existing price collection processes but also ensures that essential market information is shared in a timely, affordable, and sustainable manner with all stakeholders throughout Bhutan.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The Agricultural Marketing Information System (AMIS) in Bhutan is a notable example of how Information and Communication Technologies (ICTs) can be harnessed to advance sustainable development through e-agriculture, aligning closely with the World Summit on the Information Society (WSIS) Action Line C7. This action line emphasizes the use of ICTs to improve agricultural productivity, resource management, and food security — objectives that AMIS directly supports through its digital platform.

AMIS plays a critical role in empowering farmers by providing real-time, accessible market price information across all Dzongkhags. This bridges the information gap for rural farmers, enabling them to understand the true value of their produce and make informed decisions about when and where to sell. The system enhances market opportunities by delivering updated prices from various markets, thereby improving farmers' bargaining power, reducing dependency on middlemen, and fostering more equitable access to markets.

In addition, AMIS includes a price analysis tool that allows users to examine market dynamics over time. This capability supports data-driven decisions and strategic planning in agricultural production, making the agricultural sector more responsive to trends and consumer demand.

The impact of AMIS extends across several Sustainable Development Goals (SDGs). By enabling small and medium-sized farmers to secure better prices, AMIS directly contributes to **SDG 1: No Poverty**, helping to increase rural incomes and reduce vulnerability to exploitation. It also advances **SDG 2: Zero Hunger** by improving the transparency and efficiency of agricultural markets, which incentivizes greater production and ensures a more stable food supply.

Through its support for equitable trading and improved compensation for farmers, AMIS promotes **SDG 8: Decent Work and Economic Growth**. It bolsters the agricultural economy and creates a more just environment for rural livelihoods. Furthermore, AMIS contributes to **SDG 9: Industry, Innovation, and Infrastructure** by embodying digital innovation within Bhutan's agricultural infrastructure. The system represents a forward-thinking use of ICTs in a key economic sector, fostering sustainable development through technological advancement.

In essence, AMIS is more than a market information tool—it is a transformative digital solution that bridges critical information gaps, empowers farmers, supports economic resilience, and aligns with global development objectives. Its contribution to both the WSIS Action Line C7 and the Sustainable Development Goals highlights how effective ICT deployment can create lasting, inclusive progress in agriculture and beyond.

Social Economic and Environmental Impact of the Project

The Agricultural Market Information System (AMIS) delivers a multifaceted impact across social, economic, and environmental dimensions.

On the social front, AMIS plays a crucial role in empowering small and medium-sized businesses and farmers by providing transparent, real-time price information. This access reduces their vulnerability to exploitation by middlemen who previously monopolized market data, enabling fairer transactions and greater control over their livelihoods. With comprehensive market insights, farmers can also make more informed decisions about what to plant, when to harvest, and where to sell, helping them transition from subsistence-driven production to more market-oriented farming.

Economically, AMIS contributes directly to increased farmer income. By having accurate data on optimal selling prices, farmers can better time their sales to maximize returns, thereby improving the profitability of agricultural enterprises. It also enhances market efficiency and transparency by minimizing information asymmetry, allowing supply to align more effectively with demand. Furthermore, better access to price trends enables farmers to plan sales strategically, which helps reduce post-harvest losses by targeting markets with higher demand and avoiding spoilage of perishable goods.

From an environmental perspective, AMIS can influence more sustainable agricultural choices. If market data shows greater profitability or demand for organically grown or environmentally friendly crops, farmers may be encouraged to adopt these practices. In this way, AMIS not only supports economic development but also promotes a gradual shift toward sustainable farming models.

Highlights of the Project's Partnerships Activities

The AMIS was implemented though the EU-funded "Bhutan Trade Support" project, involving the International Trade Center (ITC) and the Royal Government of Bhutan. The GovtTech Agency is the Department's key technical partner for the platform.

Challenges and Projects Future Perspectives

AMIS faces challenges related to digital literacy and data collection. Although it is designed for easy use, a significant portion of the rural farming population may still have low digital literacy, which hinders their ability to effectively use the platform, understand the data, and integrate it into their decision-making processes. In addition, ensuring consistent and accurate data collection from 26 markets is challenging. Looking ahead, AMIS could enhance its data analytics and predictive capabilities. Beyond simple price analysis, it could leverage advanced analytics and even AI to offer more sophisticated insights, such as forecasting future price trends based on historical data, weather patterns, and demand indicators.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Prizes disseminate best practices by providing a global repository of proven solutions, allowing other countries and organizations facing similar development challenges to learn from and potentially replicate successful projects. The competitive nature of the prizes encourages innovation by incentivizing organizations to develop innovative ICT solutions that address real-world development needs, fostering a culture of digital transformation for good. Winning or even being nominated for a WSIS Prize provides significant international recognition for a project and the organization behind it, elevating their profile on a global stage. This recognition can attract investment and support, drawing the attention of donors, investors, and international organizations, potentially leading to increased funding and support for promising projects and their scaling up. The WSIS Prizes also promote multi-stakeholder engagement by bringing together governments, private sector entities, civil society organizations, academia, and international bodies working on ICTs for development, creating a platform for cross-sectoral collaboration and knowledge exchange.

WSIS Action Line C7. ICT Applications: E-science

Improving brain proteostasis as a strategy to reduce the adverse effects of aging on the cognitive decline of the elderly

Institute of Biomedical Sciences, Faculty of Medicine

University of Chile

Chile

Basic Information about the Entity

The Institute of Biomedical Sciences (ICBM) at the University of Chile's Faculty of Medicine is a leading research and academic center, established in 1997 to drive cutting-edge biomedical investigation. With a vast network of over 140 researchers operating in approximately 90 laboratories, the ICBM addresses a broad spectrum of critical health issues. Its research encompasses diverse fields such as neurobiology, infectious disease epidemiology, membrane biology, signal transduction, toxicology, environmental health, and the pathologies of hypoxia and ischemia. Furthermore, the institute is deeply engaged in advanced studies on Chagas disease, physiology under extreme conditions, functional genomics, cancer, bioinformatics, and the development of innovative diagnostics and therapies, aging, and chronic diseases. This extensive research portfolio reflects a commitment to understanding fundamental biological processes and translating this knowledge into tangible health benefits.

Beyond its prolific research, the ICBM is a cornerstone of education within the Faculty of Medicine. It plays a pivotal role in coordinating basic science instruction for undergraduate students, ensuring a strong foundation in biomedical principles. The institute is also crucial for developing highly skilled human capital through its robust postgraduate programs, including doctoral and master's degrees in various biomedical sciences. These programs train the next generation of researchers and medical professionals, ensuring a continuous pipeline of expertise to tackle complex health challenges and contribute to scientific advancement both nationally and internationally.

Project’s Description (Activities Description)

For decades, we in the biomedical sciences have pursued disease models to understand health. However, true health is not simply the absence of pathology—it is the active ability of an organism to adapt, respond, and remain functional amid both internal changes and external challenges. With that perspective, we set out to confront a global health concern that affects every human being: aging.

As we grow older, the brain undergoes profound changes—structural, molecular, and functional—that culminate in memory loss and cognitive decline. A central culprit is the breakdown of **proteostasis**, the complex system that governs protein folding, trafficking, and clearance. When this

balance is lost, the brain accumulates toxic aggregates that damage neurons and impair cognition. Our lab has focused on these processes for over two decades.

The centerpiece of our project is the **gene therapy technology we named "Proteostaser-1"**, developed to enhance brain proteostasis. Using **adeno-associated viruses (AAVs)**, we delivered a gene encoding a master regulator of protein homeostasis directly into the **hippocampus** of aged mice—an area of the brain responsible for memory and learning.

What we observed was nothing short of remarkable. These aged animals, which had already begun to lose their memory due to natural aging, **regained their cognitive abilities** after treatment. The intervention restored neuronal function through a holistic, systems-level mechanism rather than targeting a single molecular defect. These findings were published in the **EMBO Journal**, selected for the cover and highlighted editorially.

This work was not only about the results—it represented a **paradigm shift** in how we approach aging. Instead of simply managing decline, we triggered latent repair mechanisms and rejuvenated biological systems that were thought to be lost. It is a statement of possibility: that aging, like any other biological process, can be modulated.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

Our project aligns naturally with multiple WSIS Action Lines and several Sustainable Development Goals (SDGs), reflecting its broad impact beyond academic research.

WSIS Action Line Linkages:

AL C7 – ICT Applications: e-Health and Scientific Research: Our project applies cutting-edge gene delivery platforms, bioinformatics tools, and molecular diagnostics—components of the digital revolution in health care.

AL C4 – Capacity Building: We are deeply committed to education, mentoring dozens of Ph.D. students, postdocs, and young investigators, particularly from Latin America.

AL C5 – Building Confidence and Security in the Use of ICTs: Our research demonstrates how biotechnological ICTs, such as viral vectors and genetic modulation, can be safely and effectively applied in translational medicine.

Sustainable Development Goals Advanced:

SDG 3: Good Health and Well-being – We propose novel interventions to promote healthy aging, reduce the burden of cognitive impairment, and improve quality of life.

SDG 4: Quality Education – Through hands-on training in experimental neuroscience, genomics, and gene therapy, we help cultivate a new generation of researchers.

SDG 9: Industry, Innovation, and Infrastructure – Our patented technology was licensed to UCB (Belgium), illustrating real-world tech transfer and biotech innovation.

SDG 10: Reduced Inequalities – By generating high-level biomedical research in Chile, we empower Latin American science and reduce global knowledge gaps.

SDG 17: Partnerships for the Goals – Our project is built on an international collaborative framework, integrating research institutions and industry partners across the globe.

Social Economic and Environmental Impact of the Project

Social Impact

Aging affects us all, and age-related cognitive decline is one of the most feared consequences of growing old. By developing a strategy that can potentially **restore memory and delay neurodegeneration**, we aim to **preserve autonomy, dignity, and quality of life** for millions worldwide. Furthermore, we have cultivated a vibrant scientific community, inspiring young minds through mentorship and education. Many of our Ph.D. students have received prestigious national prizes, affirming our educational impact.

Economic Impact

By restoring function rather than treating late-stage disease, our approach could dramatically **reduce healthcare costs** associated with dementia and neurodegenerative illnesses. Licensing the technology to **UCB** for development into clinical trials signifies its potential for **biomedical commercialization**. The gene therapy sector represents a growing global market, and innovations from Latin America can now play a leading role.

Environmental Impact

While our project does not directly intervene in ecological processes, the **indirect benefits are significant**: reducing chronic disease burden may decrease the need for resource-intensive long-term care facilities and medical infrastructure, contributing to more sustainable health systems.

Highlights of the Project's Partnerships Activities

This project was only possible through **multinational and multidisciplinary collaboration**.

- At the national level, we worked with top researchers across Chile, including **Dr. Christian Gonzalez (University of Chile)**, **Dr. Cesar Cardenas (Universidad Mayor)**, and **Dr. Adrian Palacios (Universidad de Valparaíso)**.
- Internationally, we partnered with **Dr. Pablo Sardi** from **SANOFI**, a leader in therapeutic development for neurodegenerative disorders. Additional key collaborators include **Dr. Lars Plate (Vanderbilt University)** and **Dr. Brian Kennedy (Buck Institute for Research on Aging, USA)**.
- Our home institutions—the **Biomedical Neuroscience Institute (BNI)** and **Center for Geroscience, Brain Health and Metabolism (GERO)**—provided an intellectually rich, synergistic environment for innovation. This enabled us to expand into a second laboratory at the **Buck Institute in California**, one of the world's leading aging research centers.

These partnerships are not transactional—they are **long-term alliances grounded in trust, shared vision, and scientific excellence.**

Challenges and Projects Future Perspectives

Gene therapy is a promising but complex field. We face several **critical challenges** ahead:

- Ensuring **long-term safety and efficacy**, including **dose-response experiments** and **non-human primate studies**.
- Demonstrating **scalability and regulatory compliance** for eventual clinical use in humans.
- Addressing **public trust** and ethical considerations around neural gene delivery.

Despite these hurdles, our **vision for the future** remains bold. We aim to expand our studies to assess global **healthspan indicators**—from cardiac output to bone mass—to understand how rejuvenating the brain affects the entire organism. We also plan to explore its application to treat **ALS, Parkinson's, and other neurodegenerative conditions**. Our ultimate goal is to develop **a platform technology for brain rejuvenation**, reshaping the way society understands aging itself.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

As a researcher based in the Global South, I view the **WSIS Stocktaking platform** as a vital space where **local innovation meets global visibility**. The **WSIS Prizes Contest** validates our efforts, offering not only recognition but also a rare opportunity to connect with multidisciplinary stakeholders—from governments to civil society to industry.

In particular, WSIS helps to **break geographic and technological silos**, highlighting that meaningful, transformative science is not confined to traditional power centers. Our project, born in Chile and nurtured through global partnerships, is living proof that **innovation knows no borders**.

WSIS's emphasis on ICT for development is especially relevant in biomedicine, where the **interface between digital tools and human biology** is unlocking new possibilities for global health. Our work stands at that intersection, contributing both to scientific knowledge and to the shared global goal of healthy, dignified aging.

WSIS Action Line C8. Cultural diversity and identity, linguistic diversity and local content

BASAibu

BASAibu

Indonesia

Basic Information about the Entity

BASAibu is a nonprofit organization based in Indonesia that has spent the past decade helping young Indonesians engage in civic life. We do this through a hybrid approach that combines community-developed digital platforms with in-person policy dialogues, centered on issues that youth themselves identify as important.

Founded in Bali and now active across multiple provinces in Indonesia, BASAibu creates inclusive spaces where youth can express ideas, debate pressing social challenges, and co-develop policy solutions with the government—all in their own voices, their own languages, and through their own cultural worldviews.

Project's Description (Activities Description)

The core initiative is a multilingual civic wiki platform, launched in 2014 as a local-language dictionary and transformed into a civic participation digital platform by the community. The platform empowers young people to participate in public discourse on and offline using their local languages. By prioritizing local languages and diverse cultural expressions, the initiative is made more welcoming and inclusive. Key features and activities include a wiki-based platform that hosts space for young people to speak out about civic issues, a direct way to connect with individual local officials, local language multimedia dictionaries, and cultural encyclopedias. Civic participation "wikithons" invite young people to respond to specific civic issues of concern to them. In-person civic dialogues bring youth and community leaders together to create policy briefs and action plans inspired by winning wikithon entries. The progression of action plans in the policy briefs is monitored to ensure that policymaking and practices reflect the concerns of young people, with iterative learning from implementation informing better policies and practices. Digital literacy and communication workshops develop the capacity for youth to participate more effectively in civic life. Localized outreach has been conducted in Indonesian regions including Bali, South Sulawesi, Kalimantan, and West Nusa Tenggara. Nearly 5 million users have interacted with the platform, with primary beneficiaries including youth, educators, local language speakers, local youth communities, and policymakers. The project continues to grow as a safe space for cultural expression, civic empowerment, and multistakeholder collaboration.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The initiative directly contributes to several WSIS Action Lines and Sustainable Development Goals. It aligns with WSIS Action Line C8 by encouraging young people to publicly speak out about civic issues online, thereby generating local content about timely subjects in the local language. It supports SDG 4 through school-based workshops and teacher training to improve digital literacy, persuasive writing, and collaborative problem solving. It contributes to SDG 10 by providing underserved communities with tools to participate in the digital space in their own languages. It also supports SDG 16 by

encouraging civic engagement, dialogue with policymakers, and participatory governance. In addition, the initiative contributes to the Global Digital Compact (GDC) by advancing digital inclusion, equity, and empowerment. It helps bridge the digital divide by providing opportunities, building capacity, and fostering motivation among youth, women, and other marginalized communities. It promotes inclusive participation through multilingual engagement online and contributes to digital public goods by involving the community in creating an evolving archive of public opinion, local language dictionaries, and other shared resources. Furthermore, it fosters multistakeholder collaboration by connecting youth, communities, and decision-makers, working to normalize civic participation among Indonesian youth at the systems level.

Social Economic and Environmental Impact of the Project

The work has had wide-ranging impacts, engaging over 5 million users with a strong emphasis on youth participation and content creation in local Indonesian languages such as Balinese and Buginese. It has strengthened digital and civic literacy among young people and educators, equipping them with the skills to engage meaningfully in public discourse. Policymakers have become more responsive, with many now using the platform to solicit input directly from the community. Additionally, the initiative has supported youth-led environmental actions, including collaborative campaigns with partners like Unilever Indonesia.

Highlights of the Project's Partnerships Activities

Our success has been made possible through collaborative partnerships. Fondation Botnar has provided guidance and support throughout our evolving journey. DigitalOcean has contributed cloud infrastructure and technical mentorship. The Indonesian government has collaborated to increase the capacity, opportunity, and motivation for young people to participate more effectively in civic life. Support has also come from private donors, individuals, corporations, and civil society, all of whom we acknowledge with gratitude.

Challenges and Projects Future Perspectives

The initiative faces challenges such as limited technical capacity and infrastructure costs. However, support from partners has enabled sustainable growth. Looking ahead, there are plans to scale the platform within Indonesia, with exploration of possibilities in other Southeast Asian countries. The initiative aims to further integrate into official public participation processes to enhance opportunities for youth voices to be heard and considered in policymaking. Efforts will also focus on investing in platform stability and user experience to ensure reliable access for all users. Plans include exploring evergreen partnerships from both the private and public sectors, embedding digital civic participation as a national model through collaborations with educational institutions, media, and government agencies, and creating a self-sustaining ecosystem where youth, educators, and policymakers engage in digital dialogue to drive policy change and systemic impact.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and Prizes have been instrumental in amplifying our work. They have helped us connect with global partners, gain recognition, and share our model with others seeking to promote inclusive digital ecosystems. Being part of this community inspires and informs our efforts to make the internet a space where every voice matters

WSIS Action Line C9. Media

Girls Speak Out

Usawa Institute Trust

Zimbabwe

Basic Information about the Entity

The Usawa Institute Trust is based in Zimbabwe and runs remote programs in Lesotho, South Africa, and Zambia. Its mission is to promote gender equality and empower African girls and women to reach their fullest potential through education, advocacy, and research. The work of the institute is rooted in the values of equality, learning, justice, and collaboration.

Project's Description (Activities Description)

Girls Speak Out is the flagship programme of The Usawa Institute, acting as a dynamic and holistic incubator for the next generation of female leaders, digital storytellers, and tech innovators in Zimbabwe. It is a strategically designed after-school programme that directly confronts the digital and economic gender divide by equipping adolescent girls and young women with high-demand skills in technology, media, and advocacy. The programme is built on a powerful premise: to unlock a girl's full potential, you must equip her with the skills, tools, and confidence to create, speak, and lead, on her own terms and in a digital world.

The project's goals are multi-faceted and interconnected. Primarily, Girls Speak Out aims to dismantle the systemic barriers that prevent young women from pursuing careers in ICT and media, sectors critical to future economic participation. It seeks to close the stark digital literacy gap for girls graduating high-school from under-resourced schools, thereby enhancing their employability and their capacity for effective communication. Moreover, a core objective is to cultivate a profound sense of agency and leadership. The programme is not merely about skills transfer; it is about building the confidence and critical thinking necessary for young women to become architects of social change within their own communities.

The core curriculum provides a robust, three-pronged skills base in Digital Media, Coding, and Advocacy, featuring practical training workshops and intimate Solidarity Circles for peer support. This foundational training is then amplified through two key strategic extensions. Firstly, the Ruhusiwa #GirlsAllowed Magazine serves as the programme's public-facing platform, providing a tangible outlet for participants to publish their stories, and advocacy work. This is further enhanced by the Ruhusiwa Dialogues on social media, which position these young women at the centre of public conversations with policymakers and community leaders. Furthermore, for participants demonstrating exceptional promise and commitment, the Lentsoe Mentorship Programme offers a clear progression pathway. This advanced, 10-week virtual training provides intensive mentorship from established media

practitioners, shaping talented girls into highly effective journalists, advocates, and leaders ready to influence the girls' education agenda across Southern Africa.

The project's primary beneficiaries are adolescent girls and young women aged 14 to 24 who reside in Zimbabwe and Lesotho's high-density, low-income communities, areas where opportunities are often scarce yet potential is abundant. In addition, the programme has developed a sustainable model where it offers a fee-based version to girls in private schools, ensuring a cross-pollination of ideas and creating a wider, more diverse network of empowered young women across the socio-economic spectrum.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The Girls Speak Out programme, along with its integrated platforms like the Ruhusiwa Magazine and the Lentsoe Mentorship Programme, serves as a living and breathing embodiment of the principles enshrined in the World Summit on the Information Society (WSIS) framework. Its recognition is a testament to a holistic model that directly operationalises WSIS Action Line C9 (Media) while concurrently advancing several key Sustainable Development Goals (SDGs). Essentially, the work is a practical demonstration of how targeted ICT-led interventions can dismantle systemic inequality and foster inclusive development. The initiative is intrinsically aligned with WSIS Action Line C9, as it strategically addresses the core tenets of media plurality, balanced representation, and skills development in the digital age. The programme fundamentally democratises media creation. Instead of positioning marginalised young women as passive consumers of information, it empowers them to become active producers. By providing hands-on training in mobile journalism, podcast production, coding, and digital content creation, participants are equipped to contribute their unique perspectives to the national and global discourse, directly fostering the "plurality of information" that WSIS champions. One of the most significant contributions to Action Line C9 is ensuring balanced and diverse portrayals of women. The media landscape is too often saturated with stereotypical or one-dimensional portrayals of African girls and women. The programme directly counters this by giving them the tools and the platform, specifically through Ruhusiwa Magazine, to articulate their own realities, challenges, and aspirations. It also acts as a direct intervention to reduce imbalances in human skills and technical resources. The digital divide is not just about access to infrastructure; it is fundamentally about a gap in skills. Girls Speak Out addresses this gap by bringing cutting-edge training in ICTs to young women in low-income communities who would otherwise be excluded from the digital revolution, thereby fulfilling the call to enhance human skills through the full advantage of ICT tools.

The model demonstrates the profound interconnectedness of the SDGs, showing how a single, focused intervention can create a powerful ripple effect across multiple development targets. SDG 5 is at the very heart of the mission. The Girls Speak Out programme is a direct accelerator for this goal, particularly Target 5.b, which calls for enhancing the use of enabling technology, in particular information and communications technology, to promote the empowerment of women. It provides the skills that translate directly into social, economic, and civic empowerment, giving young women a tangible pathway to claim their rights and leadership roles. While operating outside the formal school system, the programme supports SDG 4 by providing vital, high-quality, non-formal education. It directly addresses Target 4.4, which aims to increase the number of youths and adults with relevant

skills for employment and entrepreneurship. The digital literacy, media production, and critical thinking skills imparted are precisely what is needed for decent work in the 21st-century economy. The focus on adolescent girls and young women from marginalised communities makes the programme a powerful tool for SDG 10, reducing social and economic inequalities and providing a ladder of opportunity that enables them to overcome systemic barriers and participate more fully and equitably in society. The skills acquired through Girls Speak Out also support SDG 8, with a direct and measurable impact on economic prospects. Participants are better positioned for employment and capable of contributing to the economic vitality of their communities. Beyond economic empowerment, the programme supports SDG 16. The advocacy and leadership component of the curriculum, coupled with the platform provided by Ruhusiwa, encourages young women to engage in public life, to advocate for their rights, and to promote freedom of expression. In doing so, they contribute to building more responsive, inclusive, and just societies.

The Girls Speak Out programme also directly operationalises the core ambitions of the Global Digital Compact (GDC) at a grassroots level, providing a replicable model for transforming high-level policy into tangible community impact. It demonstrates that achieving the GDC's vision requires targeted, human-centred interventions that empower those most at risk of being left behind. The programme contributes to closing the digital divide by addressing its critical human dimension. Beyond infrastructure, the true divide lies in skills and confidence. By providing hands-on training in digital media and coding to young women in underserved communities, it transforms passive access into active agency and economic opportunity. The model is also an engine for inclusion. By exclusively targeting adolescent girls, a demographic that faces a double burden of age and gender discrimination, the programme actively widens access to digital services and skills. Finally, it fosters a safe digital space. The curriculum is purposefully designed to build confidence and promote responsible digital citizenship. Through dedicated training and the peer-to-peer support offered in Solidarity Circles, participants learn to navigate the online world safely and effectively. In this way, the programme directly contributes to building trust and security in the use of ICTs.

Social Economic and Environmental Impact of the Project

The Girls Speak Out programme generates a profound, multi-dimensional impact that ripples from the individual participant to her wider community, catalysing measurable and sustainable change. At its core, the programme fosters significant social transformation by cultivating a new generation of confident female leaders and advocates. By equipping participants with a voice and a platform, it directly challenges entrenched social norms that devalue girls' contributions, building crucial social capital and strengthening community engagement. To date, over 500 girls and young women have been trained and mentored across two countries, forming a robust network of peer support and collaborative action. Economically, the programme provides a direct pathway to breaking cycles of poverty. The high-demand digital and media skills imparted significantly enhance participants' employability and create tangible opportunities for entrepreneurship. The emphasis on coding and tech development serves as a strategic intervention to close the gender gap in the STEM sector and positions graduates for future economic independence. Culturally, the programme reshapes societal narratives by shifting participants from passive subjects of stories to active authors of their own reality. Through platforms like Ruhusiwa Magazine, the girls produce authentic, empowering content that counters stereotypes and fosters a culture where the voices and experiences of girls and women are valued and centralised. Environmentally, the programme builds critical resilience to climate

change through partnerships with the former AU Youth Envoy, Ms Chido Mpemba, and the Flame Lilies Climate Initiative (FLCI). By empowering girls and young women—who are disproportionately affected by environmental crises—with digital advocacy and communication skills, the programme enables them to become effective champions for climate justice and sustainable development within their communities.

Highlights of the Project's Partnerships Activities

The approach to partnership is deeply rooted in the African philosophy of Munhu Munhu naVanhu, meaning 'a person is a person through other people,' which reflects a belief in interconnectedness and collective action. This guiding principle shapes a strategy focused on building a multi-layered ecosystem of collaborators, ensuring that the work has impact from the continental policy level down to the grassroots community. At the continental level, the most pivotal partnership is with the African Union International Center for Girls & Women's Education in Africa (AU/CIEFFA). This is not merely an endorsement but a dynamic relationship grounded in substantive capacity building, with AU/CIEFFA providing ongoing, high-level training and strategic support to leadership, staff, and beneficiaries through initiatives such as its Youth Capacity Building (YCB) Programme. In addition, the collaboration with the former AU Youth Envoy, now Advisor to the AU Chairperson on Women, Gender, and Youth, Ms Chido Mpemba, has resulted in joint digital literacy training within climate change workshops and has created tangible professional consultancy opportunities for graduates within her team. Recognising the disproportionate impact of climate change on girls and young women, the partnership with the Flame Lilies Climate Initiative forms a critical strategic alliance. Together, they co-create and implement girl-centred approaches to climate and disaster risk reduction, applying a gender-sensitive lens to one of the most pressing challenges of our time. This collaboration merges expertise in digital advocacy and girls' education with a specialised focus on eco-feminist climate justice. On the ground, these strategies are realised through a robust network of local community development and community-based organisations across Zimbabwe and Lesotho. These organisations are not just beneficiaries but essential implementation partners, providing invaluable local knowledge, ensuring the programmes are culturally relevant, and serving as the vital link between the initiatives and the adolescent girls and young women they aim to support.

Challenges and Projects Future Perspectives

Our primary operational barrier is a persistent resource constraint, particularly in sourcing sustainable funding for essential ICT tools such as laptops, cameras, and specialised software. While we provide access during training, our model's long-term success hinges on equipping each girl with these tools to use post-programme, thereby preventing a digital cliff-edge that could otherwise stifle her continued growth and innovation. Consequently, the prohibitive cost of this equipment remains a significant challenge to maximising our impact.

Looking ahead, our strategic outlook is focused on scaling our impact through two interconnected pathways. Our immediate ambition is to forge partnerships with government bodies to formally integrate the Girls Speak Out model into the public education system as an official after-school programme in underserved communities. This institutional approach will serve as the crucial foundation for our second, broader goal: to catalyse a strategic regional expansion, replicating our

success and empowering adolescent girls across Southern Africa with the tools to become architects of their own futures

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking process and Prizes are invaluable catalysts for grassroots organisations like ours. These platforms serve as a crucial validation mechanism, benchmarking our local solutions against global standards and transforming our work into a replicable model for international development. This UN-backed credibility, in turn, acts as a powerful amplifier, elevating our mission beyond local contexts and creating a unique global ecosystem for networking. Ultimately, this enhanced visibility collapses geographical barriers, enabling direct engagement with policymakers, funders, and peer organisations that would otherwise be out of reach, profoundly strengthening our advocacy and partnership-building efforts.

WSIS Action Line C10. Ethical dimensions of the Information Society

Cyber Security Education Curriculum Project

National Cybersecurity Agency

State of Qatar

Basic Information about the Entity

Cyber Security Education Curriculum Project in Qatar is the first of its kind in the region. Developed by the National Cybersecurity Agency, the project aims to provide awarenessraising content on cybersecurity and digital safety to students at all levels of education. The project also targets school teachers and educators, as well as parents.

Project's Description (Activities Description)

The project's overall framework is built on providing pioneering awareness content in the field of cybersecurity and digital safety through diverse and comprehensive learning resources tailored to the varying cognitive levels and ages of students. Each age group receives specific awareness content suited to their developmental stage. The project aims to achieve multiple objectives, including integrating cybersecurity topics into the official school curriculum—from basic digital hygiene to more advanced concepts such as encryption fundamentals—and emphasizing responsible, moral, and safe use of the internet and ICT. It introduces the concept of digital citizenship to children and teenagers, promoting responsible, ethical, and secure usage of technology. Additionally, the project seeks to create a generation capable of effectively handling digital technology, laying the groundwork for future cybersecurity specialists, and enhancing students' ability to safely and effectively use the internet and modern technological applications. It also aims to improve cybersecurity and digital safety indicators in society as a whole, with a particular focus on students.

To realize these goals, the project utilizes a variety of educational tools designed to raise awareness about the importance of cybersecurity. These tools support the project's objectives and align with the National Cybersecurity Agency's broader mission to protect society from online threats and maintain data security and privacy. The training resources include visual training and educational products, awareness-raising videos, posters, infographic designs, and a dedicated guide for teachers. The project's vision is to build a technologically safe society that contributes to achieving Qatar Vision 2030 on both social and digital fronts.

Educational content includes age-appropriate videos and guides focusing on personal data protection, device security, and privacy ethics. Resources for teachers and parents offer detailed lesson plans, follow-up activities, and guidelines to reinforce key concepts. Interactive exercises, quizzes, and evaluation tools are also included to track student progress and understanding. The project ensures inclusivity by offering materials in additional languages, making them accessible to Qatar's multilingual expatriate communities. Furthermore, specially designed content is provided for mentally and

physically challenged individuals, adapted to their cognitive abilities, to qualify and enable them to use the internet and modern electronic devices safely.

The project targets a broad audience, including students in public, private, and community schools students with special needs, educational and teaching staff, and parents of students.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

This project is a comprehensive awareness-raising initiative in the field of cybersecurity and digital safety, specifically designed to engage students across various educational levels through innovative and age-appropriate learning resources. Its primary goal is to enhance students' ability to interact safely with the internet, adopt responsible digital behaviors, and grow into a generation capable of navigating digital transformation while upholding ethical values. Notably, the project is strongly aligned with the World Summit on the Information Society (WSIS) Action Line C10, which focuses on the ethical dimensions of the information society. By fostering digital ethics and responsible online behavior, the project addresses essential topics such as digital citizenship, online privacy, cyberbullying, and ethical decision-making. The integration of these themes into the education system ensures that students not only acquire technical skills but also develop a strong moral foundation to apply them responsibly.

In addition to its alignment with WSIS, the project contributes meaningfully to several Sustainable Development Goals (SDGs). It advances SDG 4 by promoting inclusive and equitable quality education through the integration of digital ethics and cybersecurity into school curricula. It supports SDG 5 by ensuring equal access to digital safety education for both girls and boys, thereby working to close the gender gap in digital awareness. Furthermore, it contributes to SDG 16 by empowering youth with the ethical tools and knowledge needed to foster a just, inclusive, and resilient digital society. Through this holistic and ethical approach, the initiative supports a sustainable digital future that balances technological advancement with social responsibility.

Moreover, the project contributes directly to several objectives of the Global Digital Compact (GDC), reinforcing its role in shaping a safe, inclusive, and human-centered digital environment. Firstly, it supports the GDC's goal of connecting all people to the internet, including schools, by ensuring that students gain not just access but also the skills and ethical awareness to use digital tools safely. Secondly, it promotes human rights online by educating youth about digital rights, online privacy, and responsible technology use, thereby empowering them to participate meaningfully and respectfully in digital spaces. Thirdly, the project strengthens trust and safety in the digital realm by raising awareness of key cybersecurity threats such as phishing, cyberbullying, and data breaches, while cultivating a culture of digital resilience. Lastly, the initiative advances digital cooperation by offering a scalable and adaptable model that encourages collaboration among educational institutions, governments, and civil society. Through its educational and ethical lens, the project lays the foundation for a digitally empowered and secure society, fully aligned with the principles and values of the Global Digital Compact.

Social Economic and Environmental Impact of the Project

The Cybersecurity Education Curriculum has a wide-reaching impact across multiple dimensions, fostering both immediate and long-term benefits for individuals and communities. Socially, the project enhances digital literacy and cyber safety awareness among students, families, and educators. By equipping young people with the skills to navigate the internet securely, it helps reduce cyberbullying, online exploitation, and misinformation. This not only fosters responsible digital citizenship but also strengthens social trust in digital platforms and promotes safer online communities. Economically, the initiative contributes to the development of a digitally skilled workforce by providing foundational cybersecurity knowledge to a new generation. This increases employability in a rapidly evolving digital economy, helps reduce financial losses from cyber threats, and supports national goals related to digital transformation and economic resilience.

Culturally, the project promotes ethical technology use, critical thinking, and respect for digital rights. It encourages the local adaptation and integration of cybersecurity principles into educational systems, reinforcing cultural identity while also aligning with global digital norms. Although its direct environmental footprint is minimal, the project's focus on digital education supports dematerialization by reducing reliance on physical materials and encouraging more sustainable learning models. Additionally, the curriculum addresses digital responsibility topics such as energy consumption, device recycling, and responsible technology use.

The impact of the project is reflected in several measurable results. It has reached over 280,000 students across 433 schools, trained 353 educators in cybersecurity teaching methods, and provided awareness content to more than 500 parents. According to pre- and post-program surveys, student awareness of cyber threats increased by 91%, indicating a significant shift in understanding and preparedness.

Highlights of the Project’s Partnerships Activities

The project was launched in partnership with the Ministry of Education and Higher Education. The ministry's role was to facilitate the delivery of educational content to students and provide logistical support. This partnership enhanced the project's effectiveness and contributed to achieving its results and realizing its goals and vision.

Challenges and Projects Future Perspectives

The most significant challenge facing the project was the difference in knowledge levels among students. This challenge was addressed by providing educational content and learning resources at various levels, tailored to the level of awareness of students at various educational levels. To further develop the project and keep pace with rapid developments in the field of cybersecurity and digital safety, work is underway to launch the second phase of the project, which includes new learning resources that will contribute to enhancing the project's added value.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

The WSIS Stocktaking and WSIS Prizes platforms play a vital role in promoting international cooperation, knowledge sharing, and the visibility of impactful digital initiatives. They provide an inclusive and neutral space where projects from around the world can be recognized and exchanged, regardless of size or origin. These platforms contribute significantly to accelerating progress toward

the Sustainable Development Goals (SDGs) by showcasing innovative solutions that address real-world challenges in education, healthcare, governance, and digital inclusion. From a networking perspective, the WSIS process opens doors to partnerships between governments, civil society, private sector, and academia. It strengthens collaboration, encourages cross-sector dialogue, and inspires new ideas based on shared experiences. For our project, being part of WSIS has elevated its visibility and credibility on a global scale. It affirmed the relevance of our work and created opportunities to connect with stakeholders who share our mission of building a safer digital future through education and awareness.

WSIS Action Line C11. International and regional cooperation

The One Health Data Alliance Africa (OHDAA)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Germany

Basic Information about the Entity

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is a federally owned enterprise headquartered in Eschborn and Bonn, Germany. GIZ supports sustainable development worldwide by working collaboratively with partners to deliver practical solutions, manage change, and empower people to shape their own future. With a global presence and deep technical and regional expertise, GIZ develops innovative tools and provides advisory services aligned with the development policy objectives of the German Government. As a trusted intermediary, GIZ promotes results-oriented cooperation grounded in human rights, sustainability, and integrity, contributing to inclusive and impactful international development. More information is available at www.giz.de.

Project's Description (Activities Description)

The One Health Data Alliance Africa (OHDAA) is a regional initiative designed to enhance health security in Africa by integrating human, animal, and environmental health data to support the prevention and early detection of health threats. Rooted in the One Health approach, OHDAA uses a use case-driven model to address complex issues such as antimicrobial resistance (AMR), zoonotic and vector-borne diseases. By leveraging digital technologies, the project strengthens cross-sector collaboration and supports African Union institutions and member states in developing more responsive and resilient health systems.

A core aspect of the project is the implementation of decentralized data sharing technology through a federated architecture (SpeedyMesh), which enables sovereign, secure, and interoperable data exchange across countries and sectors. OHDAA promotes the adoption of unified data standards and applies AI and predictive analytics tools to enhance early warning systems and accelerate health responses. Additionally, it supports the development of technological and institutional frameworks for digitalized One Health governance, including the submission of guiding principles and policy architectures to the African Union for endorsement.

To ensure sustainability, OHDAA invests in capacity building through the creation of a continent-wide Community of Practice that fosters collaboration, skills development, and knowledge exchange in One Digital Health. Its implementation involves a broad partnership network, including AU-IBAR, Africa CDC, Smart Africa, IGAD, and relevant ministries in Cameroon, Malawi, and Rwanda. The project also targets a wide range of beneficiaries, such as youth, elderly, and rural communities, aiming to ensure that digital health innovations contribute to inclusive development and improved public health outcomes across the continent.

Examples of linkages between the WSIS Action Line, the project that was awarded for with each of the Sustainable Development Goals it Helps Advance

The One Health Data Alliance Africa (OHDAA) project, awarded under **WSIS Action Line C11**: International and Regional Cooperation, exemplifies strong alignment with both the WSIS framework and the Sustainable Development Goals (SDGs). As a regional initiative implemented by GIZ and commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ), OHDAA promotes cross-border collaboration and institutional capacity-building in Africa. Working closely with organizations like AU-IBAR, Africa CDC, and Smart Africa, the project strengthens health governance by integrating human, animal, and environmental health data through a decentralized, open-source digital platform. This collaborative model advances WSIS Action Line C11 by facilitating regional partnerships, enabling knowledge-sharing, and supporting multilateral coordination to manage health threats more effectively.

OHDAA also contributes significantly to the advancement of several SDGs. It supports **SDG 3** (Good Health and Well-being) by improving early detection and response to health threats; **SDG 5** (Gender Equality) through the inclusion of women in data science training programs; **SDG 9** (Industry, Innovation and Infrastructure) via the development and deployment of innovative digital tools and federated data governance models; and **SDG 17** (Partnerships for the Goals) through extensive collaboration with regional and global partners. For example, the project trained 20 professionals in One Health data analytics—9 of whom were women—thereby addressing gender inclusion and building local digital capacity.

In alignment with the objectives of the Global Digital Compact, OHDAA actively works to close the digital divide by promoting inclusive training and establishing a Community of Practice for One Digital Health. It fosters safe digital spaces by embedding data privacy and cybersecurity principles into the One Health Information Policy and platform design. Furthermore, it advances responsible and interoperable data governance by implementing a decentralized system that ensures sovereign yet collaborative data sharing across sectors and countries. Through these integrated efforts, OHDAA not only reinforces the principles of WSIS Action Line C11 but also accelerates progress toward inclusive, secure, and sustainable digital development in Africa.

Social Economic and Environmental Impact of the Project

The One Health Data Alliance Africa (OHDAA) project has delivered substantial social, economic, and environmental impact across multiple African countries by fostering integrated health governance and data-driven decision-making. Socially, OHDAA has improved multisectoral coordination by linking human, animal, and environmental health data across institutions such as the Africa CDC and AU-IBAR, and countries including Cameroon, Malawi, and Rwanda. This has resulted in the creation of the African Union Digital One Health Platform, a decentralized system enabling cross-sectoral data sharing and policy support. For example, Malawi now has harmonized rabies data across ministries, while Cameroon developed its own One Health Information Platform (COHIS), both enhancing their ability to respond to health threats collaboratively and efficiently.

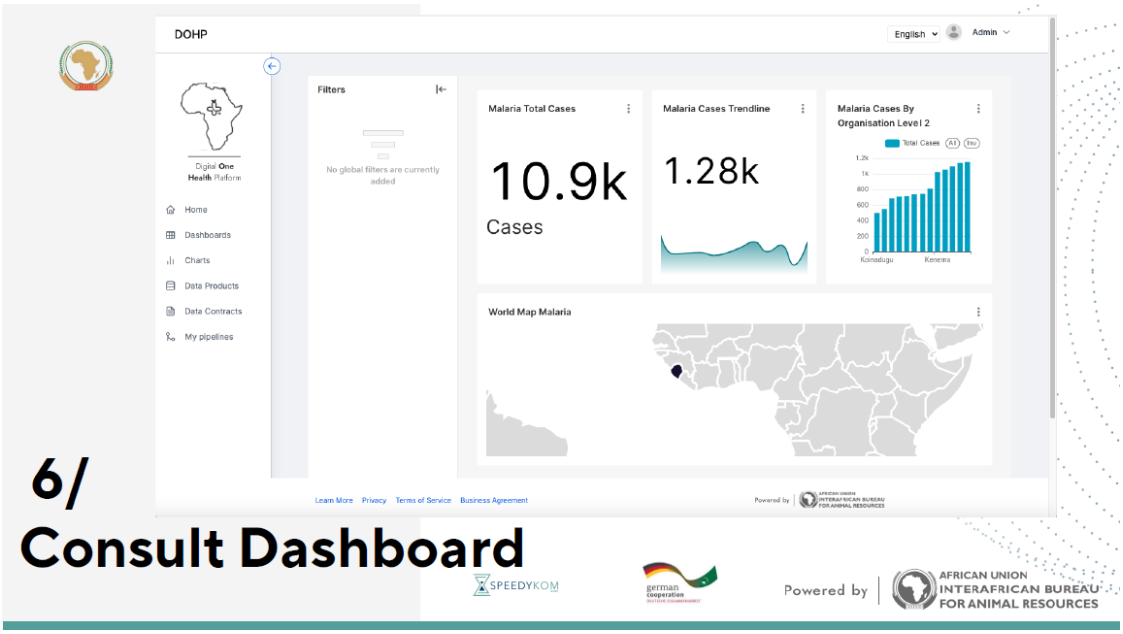


Figure 1: Dashboard analysis for malaria cases AU Digital One Health Platform prototype

Economically, the project has strengthened digital capacity through the establishment of the One Digital Health Community of Practice, engaging over 500 experts and facilitating more than 1,500 exchanges. These forums have supported knowledge transfer, policy dialogue, and small-scale project implementation focused on local use cases, boosting national and regional capacity for digital health innovation. Moreover, the platform's predictive analytics—such as the dashboard in Malawi analyzing rabies prevalence and intervention effectiveness—support governments in quantifying the economic impact of diseases, such as loss of productivity due to infection, which can inform more cost-effective health strategies.

Environmentally, OHDAA advances sustainable practices by enabling a unified governance approach that incorporates environmental health data into broader health monitoring systems. The project has driven the adoption of the AU's One Health Information Policy and Architecture, encouraging countries and sectors to align on data standards and protocols. This integration of environmental considerations into health policy enhances the continent's resilience to zoonotic diseases and other health threats that emerge from the human-animal-environment interface, fostering a holistic approach to sustainable development and public health.

Highlights of the Project's Partnerships Activities

The One Health Data Alliance Africa (OHDAA) thrives through strong and strategic partnerships that enhance its reach, credibility, and effectiveness. At the continental level, the African Union—through AU-IBAR and Africa CDC—plays a central role by providing political leadership and technical guidance. Their support has enabled the development of principles for One Health data exchange and the creation of a digital platform that allows for secure, cross-sectoral information sharing. With Africa CDC, OHDAA also co-leads a vibrant Community of Practice on One Digital Health, directly contributing to the implementation of Africa CDC's Digital Transformation Strategy 2020–2030.

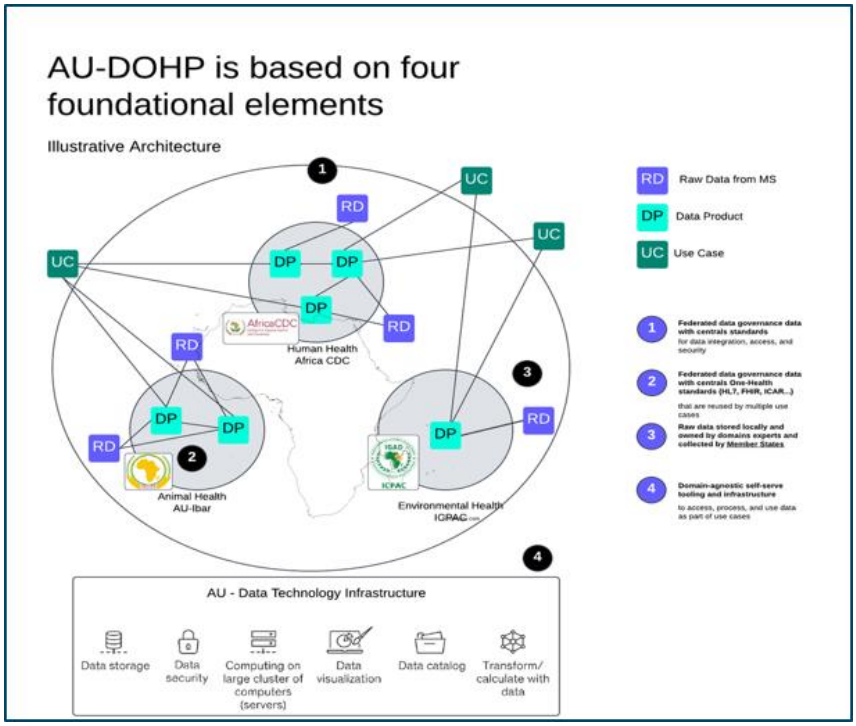


Figure 2: African Union Digital One Health Platform illustrative architecture

Regionally, IGAD supports the integration of environmental and health data, particularly for diseases like malaria. IGAD's facilitation of member state engagement ensures cross-national cooperation and strengthens the alignment of regional approaches with continental priorities. At the national level, Cameroon has been a key player through the Ministry of Health and the One Health Platform in developing the Cameroon One Health Information System (COHIS), enabling multisectoral data sharing. In Malawi, close collaboration with the Ministries of Health and Agriculture has improved rabies data collection and joint analysis across sectors, breaking down silos between animal and human health. Rwanda, through its Biomedical Centre and other institutions, has provided a national model for integrating veterinary and public health information systems.

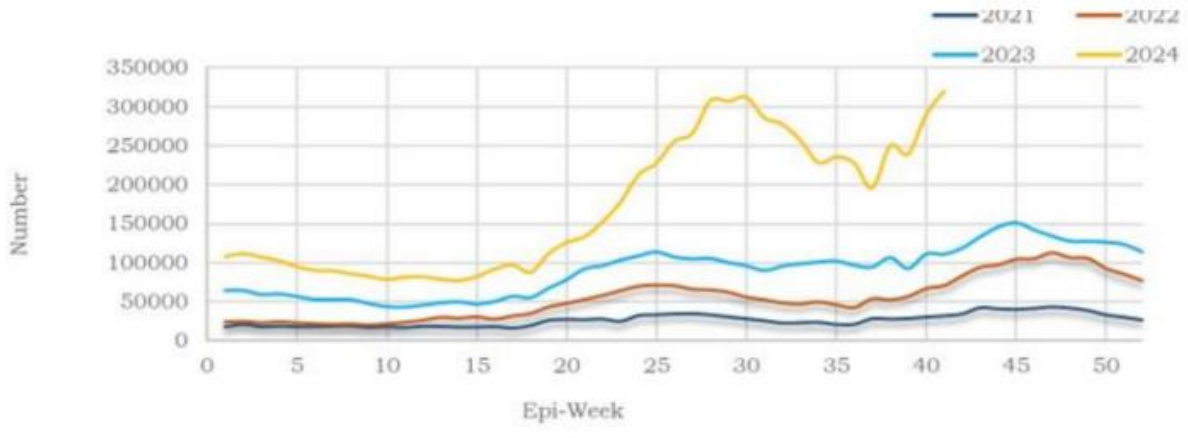


Figure 3: Malaria Trends Dashboard in Ethiopia from for the period 2021 to 2024

In addition, the Smart Africa Alliance serves as a major enabler of digital transformation by promoting policy harmonization and data governance. Its support through initiatives like the Smart Africa Trust Alliance (SATA) helps OHDAA align with broader African digital health strategies. These diverse partnerships ensure that OHDAA's impact is deeply embedded across technical, institutional, and policy levels—maximizing sustainability and scalability across Africa.

Challenges and Projects Future Perspectives

The OHDAA project has made significant strides in establishing cross-sectoral and cross-border digital health collaboration, yet it faces several persistent challenges. One major barrier is the fragmentation of data and digital systems among countries and institutions, which complicates interoperability and slows progress. Additionally, hesitancy around data sharing—driven by concerns over data ownership, sovereignty, and privacy—remains a significant obstacle to the open exchange of information between institutions and across borders. Technical capacity is another pressing issue, as many national institutions still lack the infrastructure and skilled personnel needed to manage and maintain One Digital Health solutions independently. Furthermore, misalignment in national policies and digital health strategies, as well as varying levels of political will and regulatory maturity across African countries, hinder the integration of One Health approaches at the national and regional levels. Lastly, there are concerns around the long-term sustainability of digital One Health investments, particularly regarding ongoing management and maintenance.

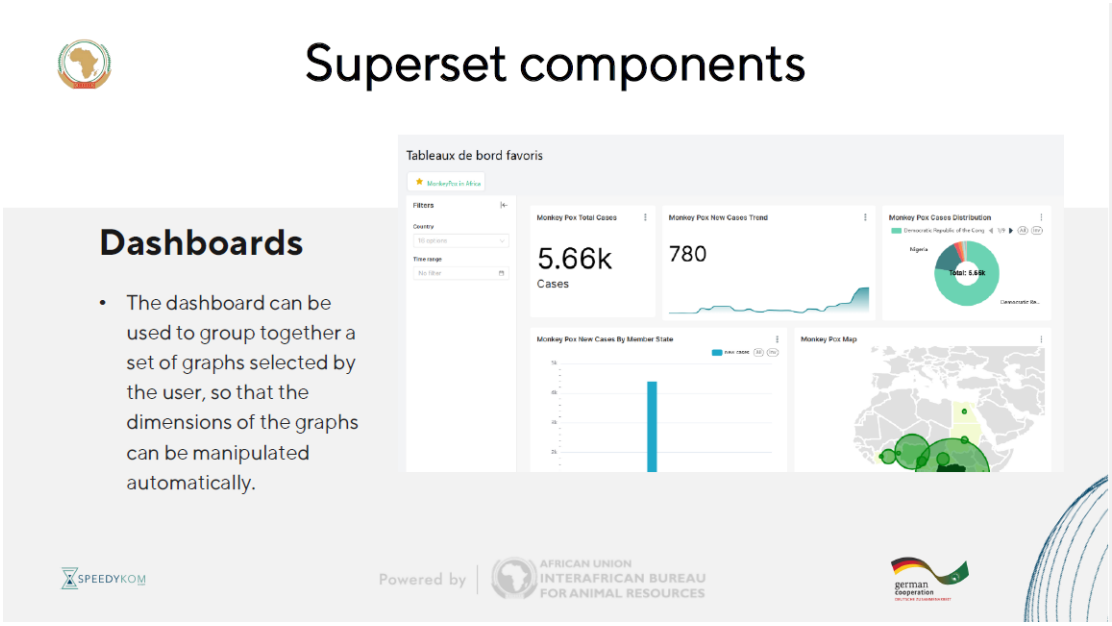


Figure 4: Dashboard analysis for MPox cases AU Digital One Health Platform prototype

Looking ahead, OHDAA is committed to overcoming these challenges through strategic and ambitious next steps. The project aims to expand its approaches beyond current pilot countries by engaging new partner countries and regional organizations, thereby increasing its reach and impact across the continent. Capacity strengthening is also a top priority: by training government officials, health professionals, and IT specialists, the project will help institutionalize digital health knowledge and improve technical resilience within national systems. Lastly, there are plans to bolster digital infrastructure by supporting the deployment of reliable servers, improving connectivity, and

promoting the use of open-source technologies and digital public goods to ensure scalability, accessibility, and sustainability of the One Health digital ecosystem.

Views on WSIS Stocktaking and WSIS Prizes Contest, Including its Relevance to International Development

Participating in the WSIS Stocktaking process and being part of the WSIS Prizes Contest has been both inspiring and validating for the OHDAA initiative. These platforms offer far more than a space to showcase projects—they serve as powerful mechanisms for connecting people, ideas, and innovations that might otherwise remain isolated. Through WSIS, we were able to reflect on how our work fits within the broader global digital development landscape. In the day-to-day realities of implementing policies, running workshops, and deploying technology, it is easy to lose sight of the larger mission. WSIS helped us reconnect with that mission, reminding us that our efforts in digital health and cross-sector collaboration are part of a much greater movement to drive sustainable development through digital transformation.

The WSIS process also opened doors to meaningful networking and learning opportunities. It brought us into contact with organizations facing similar challenges, as well as those who have developed tested and effective solutions. These exchanges are invaluable for knowledge-sharing, troubleshooting, and identifying potential collaborations. The visibility and credibility the WSIS platform provides have helped elevate the OHDAA project onto the global stage. This recognition enhances our potential to scale the initiative, secure funding, and build partnerships that extend its reach and long-term impact.

Ultimately, WSIS is more than just a recognition platform, it is a catalyst for growth, innovation, and collaboration. Being awarded within this framework not only affirms the value of our work but also reinforces our commitment to using digital innovation to solve complex global challenges. For OHDAA, this recognition represents a significant milestone and an invitation to continue pushing the boundaries of what digital cooperation can achieve for public health, sustainability, and development.