ITU Regional Development Forum for Africa (RDF-AFR)

**'Digital transformation for a sustainable and equitable digital future:
Accelerating the implementation of the SDGs in Africa"**

organized by the International Telecommunication Union in collaboration with the
Ministry of Innovation and Technology, Ethiopia

3-5 October 2023
Addis Ababa, Ethiopia

Please note that submitted information will be presented during the RDF-AFR P2C Roundtables and
it will also be reflected on the pledging platform of the Partner2Connect Digital Coalition.

CONTRIBUTION FORM

ORGANIZATION: Mauritius Digital Promotion Agency (MDPA)

FOCAL POINT: Ministry of Information Technology, Communication and Innovation,
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TITLE: MDPA project: National IOT platform (SDG Goal 9-Industry, Innovation and Infrastructure)

DESCRIPTION OF ACTION:

IoT and GIS are key technologies being adopted by various Ministries and Departments in
Mauritius, more often independently and using commercial applications. MDPA has set up a
National IoT platform provides a secure open source platform which allows reduction of project
cost of ownership, inter-operability of various systems and data among institutions and very fast
deployment of new projects and paves the way for other Ministries and Departments to implement
their projects in a unified manner.

In this context the following projects have been initiated:

1. Smart farming project at Food & Agricultural Research & Extension Institute (FAREI) by
    making use of sensors, data analysis, computer vision and other computer driven analytical
    tools used for optimizing animal welfare, productivity, and efficiency. Several
    environmental sensors to measure parameters such as wind speed and direction, rainfall,
    UV level, light intensity and barometric pressure data are being received and collected
    using weather stations on the National IOT Network to enable researchers from FAREI
    study environmental impact on their production systems.
2. Smart water meter project at CWA Quartier Militaire reservoir. Under SDG 6, this action will
    increase water-use efficiency as customers will have greater visibility of their daily water
    consumption. The Smart Water Meter Programme will also contribute to SDG 12, which
    aims to ensure sustainable consumption, management and efficient use of natural
    resources. With a reduction in water consumption, less energy is expended on the
    treatment and production of clean water, which then contributes to overall climate change
    strategy (SDG 13).
3. National Environmental Laboratory (NEL) "Smart Water Quality real time Monitoring" and
    the Ministry of Environment "Lagoon Water Quality Monitoring"(LWQI). This target SDG 6
    (Clean water and sanitation) which aims to "ensure availability and sustainable
    management of water and sanitation for all." The Lagoon Water Quality Index (LWQI), uses
    an Internet of Things (IoT) Real Time Online Monitoring System for public beaches around
    Mauritius. The LWQI system will enable the prompt assessment of the quality of our

beaches and the ecosystems including factors such as nutrient levels, pollution, and biodiversity.

Real-time data will be made available through Application Programming Interface (APIs) as open data to enable data analytics and the development of Web and Mobile Applications. This will boost the development of Mobile Apps that will improve efficiency and provide better service to the citizens.

One such app is "Mofarm" which is an android mobile app which enables farmers to report on new born animal data (proof with pictures) to FAREI, whereby the captured data is stored in an online database for data analysis and statistical data and to better assist the farmers and breeders community.

COUNTRIES in FOCUS: Mauritius

YEARS of IMPLEMENTATION: [Tick the relevant boxes or delete the irrelevant items]

☒ 2023

☒ 2024

☒ 2025

RELEVANT ITU REGIONAL INITIATIVE: [Tick the relevant boxes or delete the irrelevant items]

☒ AFR1: Supporting digital transformation to usher in a rapid transition to a digital economy while accelerating innovation in Africa

☐ AFR2: Implementation and expansion of broadband infrastructures, connectivity and emerging technologies

☐ AFR3: Building trust, safety and security in the use of telecommunications/ICTs and protection of personal data

☒ AFR4: Fostering emerging technologies and innovation ecosystems

Please find more information on the ITU RIs 2023-2025, as defined by WTDC-22, here.

RELATED ITU-D PRIORITIES AS DEFINED BY THE ITU WORLD TELECOMMUNICATION DEVELOPMENT CONFERENCE 2022

☐ Affordable connectivity

☒ Digital transformation

☐ Enabling policy and regulatory environment

☒ Resource mobilization and international cooperation

☐ Inclusive and secure telecommunications/ICTs for sustainable development

Please find more information on the ITU-D Priorities, as defined by WTDC-22, here.

RELATED ITU PRIORITIES AS DEFINED BY ITU PLENIPOTENTIARY CONFERENCE 2022

☒ Spectrum use for space and terrestrial services

☐ International telecommunication numbering resources

☐ Inclusive and secure telecommunication/ICT infrastructure and services

☒ Digital applications

☒ Enabling environment

Please find more information on the ITU Priorities, as defined by PP-22, here

RELATED WSIS ACTION LINE: [Tick the relevant boxes or delete the irrelevant items]

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

☒ C2: Information and communication infrastructure

☐ C3: Access to information and knowledge

☐ C4: Capacity building

☐ C5: Building confidence and security in the use of ICTs

☒ C6: Enabling environment

☒ C7: ICT applications

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

☐ C9: Media

☐ C10: Ethical dimensions the Information Society

☐ C11: International and regional cooperation

RELATED SDG: [Tick the relevant boxes or delete the irrelevant items]

☐ SDG 1: No Poverty

☐ SDG 2: Zero Hunger

☐ SDG 3: Good Health and Well- being

☒ SDG 4: Quality Education

☐ SDG 5: Gender Equality

☐ SDG 6: Clean Water and Sanitation

☐ SDG 7: Affordable and Clean Energy

☐ SDG 8: Decent Work and Economic Growth

☒ SDG 9: Industry, Innovation and Infrastructure

☐ SDG 10: Reduced Inequalities

☒ SDG 11: Sustainable Cities and Communities

☐ SDG 12: Responsible Consumption and Production

☐ SDG 13: Climate Action

☐ SDG 14: Life Below Water

☐ SDG 15: Life on Land

☐ SDG 16: Peace, Justice and Strong Institutions

☒ SDG 17: Partnerships for the SDGs