**COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)**

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# Submissions from entities in the United Nations system, international organizations and other stakeholders on their efforts in 2021 to implement the outcomes of the WSIS

## Submission by

World Health Organization

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 25th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

World Health Organization

***World Summit on the Information Society: eHealth action line (C7)***
*The World Health Organization (WHO) Report for 2021. Priority areas in the action line include improving digital health governance, digital health solutions implementation for PHC, health information systems, facilitating access to knowledge and information, strengthening continuous digital health training and the use of digital health in science and research, promoting international standards for the exchange of health data, strengthening systems for disaster response and communicable diseases monitoring and alert, and innovation in health scaling. .*

***Part One:*** **An executive summary (half a page) of activities undertaken by all stakeholders, progress made, and any obstacles encountered.**

**Summary**
In the 2020 World Health Assembly, WHO member states unanimously approved the Global Strategy on Digital Health (Global Strategy), which calls for close collaboration with international partners and other stakeholders, including the private sector, to collaborate around common goals and to prioritize investments into digital solutions and systems to advance the health of all. In addition within the WHO 13th Global Programme of Work, 4.1.1 and 4.1.3 focus on WHO leveraging the use of digital health solutions and information systems to advance global and national health goals.

The vision of the global strategy is to improve health for everyone, everywhere by accelerating the development and adoption of appropriate digital health solutions. It has prioritized four strategic objectives towards the achievement of the vision: 1) Promote global collaboration and advance the transfer of knowledge on digital health; 2) Advance the implementation of national digital health strategies; 3) Strengthen governance of digital health at global and national levels; 4) Advocate for people-centred health systems that are enabled by digital health. A series of action plans have been recommended to be taken by WHO, countries and other partners to implement the global strategy.

To help countries with the implementation of the global strategy on digital health, especially mitigating the COVID19 pandemic through digital interventions, WHO released the following products :

i) The WHO Digital Health Investment and Implementation Guide

ii) WHO Digital Health Platform

iii) Ethics and governance of artificial intelligence for health

iv) Digital Documentation on Covid19 Certificates

These build on previous tools released to support countries in the selection of appropriate digital health interventions, which include the WHO set of recommendations in the first guideline on digital health intervention contributing to health system improvement, the WHO – ITU national eHealth toolkit etc.

To strengthen the enabling environment for Digital health at country level, the WHO and ITU, with support from development partners, developed a national health workforce capacity building programme through a digital health course for health managers at the tactical level of the health system. The course systematises WHO guidelines for national actors across related government ministries. The course aims to fulfil the WHO global strategy aspirations on capacity building for digital health, as well as the WHO resolution on digital health.

While there has been steady progress on the use of digital technologies for health, ensuring effective multisectoral collaboration, available resources (human and financial), and an enabling environment for scalable and interoperable digital health solutions still remain significant challenges, especially for low- and middle-income countries. Policies for ensuring quality, safety and ethical standards with respect to the confidentially of health data are still lagging in many countries. The workforce capacity building on digital health, more specifically around governance and leadership has been among high priority areas specifically in many low- and middle-income countries.

**Uptake and trends**

In line with the global strategy on digital health, WHO has prioritized the advancement of evidence-based digital health solutions that are consistent with WHO data, clinical and public health recommendations. Interventions in this area include WHO SMART guidelines that detail the content and functionality specifications to which digital health solutions should be developed to be consistent with WHO recommendations. The smart guidelines promote the adoption of digital health standards to enable the secure, accurate and timely transmission of health data, taking full account of privacy, security and confidentiality requirements, in this regard.

In the wake of the COVID19 pandemic, WHO released the Digital Documentation of COVID19 certificates guidance (DDCC). The DDCC is a guidance document for countries and implementing partners on the technical requirements for developing digital information systems for issuing standards-based interoperable digital certificates for COVID-19 vaccination status, and considerations for implementation of such systems, for the purposes of continuity of care, and proof of vaccination.

Capacity building for digital health remains a critical area both for overall health systems strengthening and emergency trends in digital heath such as Artificial intelligent (AI). WHO and the ITU, together with development partners, have developed a national digital health course that systematises WHO guidelines for health system strengthening. Several countries have been trained on this course across WHO regions. Through the broadband commission working group on AI capacity building competency framework, WHO will contribute towards the 2022 AI Broadband commission report related to AI in health.

WHO continues to support its Member States through policy guidance, evidence-building, provision of norms and technical assistance for the adoption of digital technologies to support their health priorities and achieving SDGs through stakeholder engagement and cross-sectoral collaboration at the global, regional and country levels.

Progress has been made to discuss ethical challenges in the use of digital technologies such as artificial intelligence in public health and provide appropriate guidance for countries in their ethical design and use In June 2021, WHO published Guidance on Ethics & Governance of Artificial Intelligence (AI) for Health after 18 months of deliberation amongst global leading experts on the ethical challenges of the use of AI technology for health. The document outlines a set of policies, principles and practices that could resolve the identified challenges and lead responsible use of AI in the sector, and identifies six principles to ensure such technologies put ethics and human rights at the heart of its design, deployment and use. It also outlines a set of recommendations to secure a governance framework for AI for health that maximises promises and holds stakeholders – in the public and private sector – accountable and responsive to all end-users.
Following the Member States briefing in the beginning of July 2021, there is a growing interest among country authorities and other key stakeholders in how to best implement the 47 recommendations under the document. Knowledge transfer activities are currently ongoing to accelerate translating timely knowledge into actionable information for the digital health community across the globe. In 2022, WHO intends to work with partners such as the ITU-WHO AI4Health focus group, Broadband commission to build digital health capacity building programmes for AI.

**Challenges**

There still remain technical, including interoperability, human resource, social, economic and other barriers that affect a country's ability to take advantage of digital health and ensure equity in the use of its application. Building a strong foundation, including strong governance, the necessary infrastructure, standards, legislation and workforce, especially in low- and middle-income countries, persist as barriers to implementation. Legal, privacy and ethical issues related to the use and access to personal health data still presents challenges in many countries.

The substantial increase in the number and range of digital health solutions, particularly donor-driven projects, continue to pose challenges in scale and governance, as well as for producing scalable and interoperable national solutions for better access to health care. Harnessing digital technologies for health requires cross-sectoral collaboration, commitment and strategic planning. There should always be careful consideration of the country context when introducing innovative approaches, ensuring the necessary oversight and regulation in order to realize the benefits and avoid potential harms.

WHO is working with its partners to provide guidance and assessment frameworks on digital health innovations to help countries to select, adopt, manage and evaluate their solutions in order to aid good governance and ensure wise and practical investment decisions.

***Part Two:*** **A brief (1–2 pages) analytical overview of trends and experiences in implementation at the national, regional and international levels and by all stakeholders, highlighting achievements and obstacles since WSIS and taking into account the follow-up and review of the 2030 Agenda for Sustainable Development. This could include information on the facilitation process of implementation, monitoring and cooperation among stakeholders.**

To help facilitate the implementation of the Global strategy, to promote the use of evidence for the adoption of digital health as well as the measurement and development of indicators and tools for its socio- economic impact on national, regional and international level, WHO is working on developing a global digital health dynamic maturity model (DDHMM).
As a concrete output from the Global strategy on digital health (GPG NO. 885). The digital health dynamic maturity model (DDHMM) values process facilitation. It allows countries to define the status of the digital health strategy implementation, provides access to shared knowledge tools and resources and assists to determine which actions to take and invest under the agreed action plan of the global digital health strategy. Three areas of work have been rolled out, focusing on 1. Scoping: harmonization of indicators from existing frameworks aligned with digital health strategy; 2. Operationalising: contextualise concept with visual elements through online platform; 3. Populating: establish a robust mechanism to dynamically update information from ongoing initiatives + new initiatives defined under the strategy implementation roadmap.

***Part Three:*** **A brief description (1–2 pages) of:**

**(a) Innovative policies, programmes and projects which have been undertaken by all stakeholders to implement the outcomes. Where specific targets or strategies have been set, progress in achieving those targets and strategies should be reported.**

**(b) Future actions or initiatives to be taken, regionally and/or internationally, and by all stakeholders, to improve the facilitation and ensure full implementation in each of the action lines and themes, especially with regard to overcoming those obstacles identified in Part Two above. You are encouraged to indicate any new commitments made to further implement the outcomes.**

Digital health solutions play an important role in responding to the COVID-19 pandemic. To make wider access to standard based curated digital solutions, The WHO is working on a Digital health clearinghouse which is intended to help government users to identify digital solutions that match specific needs, and provide needed information to facilitate informed decisions. The Clearinghouse is intended to be a platform that connects Ministries of Health and partners with providers of digital health solutions that are assessed to support countries' health system needs. It aims to curate for governments those digital health products that meet WHO documented minimum digital health specifications, and which contribute to health system needs. It will complement the UN Secretary generals roadmap for digital cooperation, and specifically, the work of the Digital Health public goods alliance.

Users will be able to search for technologies based on their own needs and constraints; solutions will be reviewed for their demonstrated value, conformance to recommended standards, ability to scale nationally and integrate with existing systems, and potential to function within a diversity of settings and constraints. The Clearinghouse will include digital solutions that have been assessed by external and internal WHO reviewers, and that meet minimum requirements for the intended use. Uses will be able to search and filter, select solutions that fit desired needs as per national digital health strategies. For each listed solution a factsheet will be available with essential information, including use cases, relevant technical specifications and contact information.