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 2023 to implement the outcomes of the WSIS

Submission by

United Nations Children's Fund

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 27th 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.

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UNICEF WSIS Report 2023

UNICEF's reporting for 2023 focuses on the reporting template **Part Three: Innovative policies, programmes and projects** which have been undertaken, and future actions.

C1. The role of public governance authorities and all stakeholders in the promotion of ICTs for development

Child protection: The <u>Disrupting Harm</u> project, conducted in partnership with ECPAT International and INTERPOL, provides the most comprehensive evidence-based overview to date on how technology facilitates the sexual exploitation and abuse of children, both online and offline, and how national protection systems are addressing online child sexual exploitation and abuse (OCSEA). The success of the first round of Disrupting Harm studies (2019 – 2022) in 13 countries across Eastern and Southern Africa, and Southeast Asia has led to its expansion in 12 countries across four new regions: Europe and Central Asia, Latin and Central America, Middle East and North Africa, and South Asia. Between 2023 and 2025, UNICEF will collect data from various research participants, including children, to identify priority areas and provide national assessment reports with evidence-based recommendations for interventions to key stakeholders.

Digital inclusion: Working with the London School of Economics and Political Science, UNICEF reviewed 126 digital inclusion policies and related public communiqués using its Child-centred Digital Equality Framework. The review <u>A Global Review of Selected Digital Inclusion Policies</u> aimed to assess whether these policies aimed to increase digital inclusion. It was also to highlight promising practices and identify policy gaps that need to be addressed to achieve greater digital equality. This global review outlines key requirements for holistic policy approaches to digital inclusion including.

Virtual environments: UNICEF and Diplo published a report on the <u>metaverse, extended reality (XR)</u> <u>and children</u>, outlining key opportunities, risks and policy considerations, with recommendations for both policymakers and companies.

Foresight on digital issues: UNICEF uses foresight techniques to scan the horizon for frontier issues, analyzing how digital transformation affects children, and advancing recommendations and policy advice for governments and the private sector. We release an annual <u>Outlook</u> for the following year to help the organization and others working with children better anticipate the changing global landscape. We work closely with our <u>Youth Foresight Fellows</u> from around the world to help the Organization navigate the future.

C2. Information and communication infrastructure / C7. ICT Applications: e-Learning / WSIS Target 2: To connect universities, colleges, secondary schools and primary schools with ICTs, To connect all secondary schools and primary schools with ICTs

Giga for school connectivity: Giga is a UNICEF and ITU initiative that aims to connect every school in the world to the internet by 2030. To achieve this mission, Giga supports governments by providing open-source connectivity solutions and technical support in the areas of mapping, planning, procurement, and

financing. Connecting schools starts with mapping where they are, and so far, Giga has mapped 2.1 million schools in 140 countries. Giga has also helped unlock more than \$1.7 billion in eight countries to fund school connectivity. Coming from various sources such as grants, loans, Universal Service Funds, and proceeds from government auctions, these funds are critical to connecting schools in the world's most remote and underserved areas. Giga has recently expanded its footprint from 18 to 29 countries and is on track to connect more than 25,000 schools and 10 million students to the Internet in the next 18 months.

HealthConnekt for primary health care connectivity: UNICEF, the Africa CDC, Smart Africa, GSMA and Giga aim to connect 100,000 Health Facilities and 1,000,000 Health Workers to the internet by 2030. UNICEF is collaborating with WHO on the Geo-Enabled Health Facility Data (GHFD) initiative, strengthening National Health Facility Master Lists (HMFLs). Through HealthConnekt, UNICEF plans to expand analysis to include availability of reliable connectivity and power, which will contribute to integrated investment cases to catalyze financing. Five countries are expected to be onboarded in late 2023 / early 2024 as part of the initial learning phase of this programme.

C3. Access to Information and Knowledge

Bebbo parenting app - Bebbo is an innovative parenting app developed by UNICEF that has been deployed across 14 countries in Europe and Central Asia (Albania, Belarus, Bulgaria, Greece, Kosovo, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Romania, Serbia, Ukraine, Uzbekistan and Tajikistan). This digital parenting program has crossed **one million downloads** on the app store and has content available in 14 languages. The open-source solution is designed to support and guide parents in their journey of raising children (0-6 years). The app offers a variety of features to help parents track their child's development and also access advice through well-researched content, including age-appropriate activities/games. Bebbo's strength lies in partnerships with national governments, experts and organizations in each country to ensure that parents everywhere gain access to valuable localized content, including national immunization calendars and more.

C4. Capacity building

In partnership with UNICEF, Thinking Machines builds <u>Southeast Asia AI Research Bank for</u> <u>Development (AI4D)</u>. The bank provides a catalog of models with documentation, code, and preprocessed datasets for those working at the intersection of machine learning and development. In collaboration with UNICEF, Thinking Machines has played an instrumental role in developing the catalog to make data science more accessible to data practitioners and decision-makers, unlocking the power of AI to drive impactful technology solutions in the East Asia and Pacific region. Guided by the principles of open-source and open-methods, this collaboration has successfully produced three key data products, Geowrangler, Relative Wealth Mapping and Air Quality.

Digital Health Planning National Systems: WHO and the wider community of digital health have produced numerous resources detailing how to effectively use digital technologies for health service delivery. In 2018, WHO in partnership with International Telecommunication Union (ITU) developed a course titled Digital Health Planning National Systems (DHPNS) to tie together these resources into an

easily digestible manner targeting planners, practitioners, policy makers and people. UNICEF has been working with WHO/ITU to support the roll out of DHPNS to empower ministry leadership with the technical concepts and planning tools. 120 participants from 22 countries were trained in 2022, while additional rollouts of the course in Malawi, Burkina Faso, Lebanon, Iraq, Egypt and several countries in the Latin American region are planned for late 2023 and early 2024.

Advancing responsible business conduct in the digital environment: UNICEF works with stakeholders, including industry and governments, to promote the integration of children's rights across business policies and practices. This year, UNICEF initiated an initiative geared at developing guidance on business child rights impact assessments in relation to the digital environment (guidance outputs to follow in 2024). In October 2023, UNICEF also issued <u>guidance</u> for companies in the online gaming value chain on advancing diversity, equity, and inclusion from a child rights perspective.

In 2021, UNICEF together with the LEGO Group developed a child-centered framework to support the design of digital play experiences that contribute positively to children's well-being. The **Responsible Innovation in Technology for Children (RITEC) RITEC-8 framework** is based on a combination of qualitative and quantitative data and identified, based on children's own views and experiences, eight aspects of their well-being that digital play has the potential to positively contribute towards. The framework provides a target for designers as they conceptualize and develop digital play experiences for children and offered a set of design affordances that children believe will enhance their well-being if implemented within digital play experiences.

In 2023, a second output from the RITEC partnership empirically validates the framework from the first phase through three unique research projects where we engaged with children and families in 6 different countries. Through these three mixed-methods studies conducted with children from different regions of the world, we are able to establish empirically that different forms of digital play contribute positively to aspects of children's well-being in the RITEC-8 framework. In doing so, we lend further support to the framework as a tool to help designers meaningfully contribute to children's well-being through design, while also demonstrating the importance of digital play for children's learning and development. Observational research from all three research studies also shed further light on how and why digital play contributes to child well-being, which is key for turning these findings into concrete guidance for designers. The **second report** from the RITEC partnership will be published in early 2024 followed by a **Guide for Business on how to design digital play experiences with child well-being in mind**.

C6. Enabling environment

In April 2021, as part of the UN's response to Covid-19, UNICEF and WHO jointly launched the **Digital Health Centre of Excellence (DICE)**, supported by BMGF, BMZ / GIZ, CDC, Gavi, Global Fund, PATH / Digital Square, USAID, and the World Bank. This initiative was aimed at strengthening coordination of Covid-19 related investments in digital health and information systems, improving knowledge management and information sharing, enhancing capacity, and providing targeted technical assistance to countries and related Covid-19 proposals. As part of India's G-20 stewardship, WHO launched the Global Initiative on Digital Health (GIDH) in August 2023. DICE is being transitioned into the GIDH, which will strengthen alignment with the global health architecture.

C7. ICT Applications: e-Learning

<u>Girls' digital literacy in the East and Asia Pacific Region</u> (Report): UNICEF calls on stakeholders to address the gender digital divide by supporting the empowerment of girls to develop advanced digital competencies safely and by ensuring both girls and boys have increased access to affordable internet and digital devices. This report provides a snapshot of adolescent girls' digital literacy across the East Asia and Pacific region with a special focus on Cambodia, Indonesia, Lao PDR, Timor-Leste and Viet Nam. Digital literacy is critical to participation in today's world and by the year 2030, up to 80 per cent of jobs in Southeast Asia will require basic digital literacy and applied information and communication technology (ICT) skills. In 2022, an estimated 73 per cent of youth aged 15–24 years in the Asia Pacific region used the internet, but use and digital competences vary by gender across the region.

Several Member States have joined <u>Gateways to Public Digital Learning</u> ("Gateways"), the flagship UN initiative to make digital education a public good. Among those countries are Bulgaria, Egypt, Finland, Jordan, Mongolia, Singapore, and Uruguay. Co-led by UNICEF, Gateways brings together public and private partners to close critical gaps and barriers in access to free, quality digital learning content and platforms, so that every child can benefit from the opportunities that technology brings to learning and skills development, including children in humanitarian settings and those living with disabilities. Gateways channels collective action to improve the monitoring of equity and quality dimensions in government-endorsed digital learning; promotes cooperation among Member States to share good practice and lessons learned; and works towards setting digital education standards.

Publication of the <u>Pulse Check on Digital Learning Report</u>. This report defines and takes the pulse of five vital elements of digital learning. It's key finding, namely that a third of platforms that were used during the education response to COVID-19 are no longer functional or updated, is the justification for a call for action for Member States to build on the investment made and join the Gateways Initiative. The five vital elements covered are ICT in Education policies and financing, digital learning platforms and content, teachers and school leadership, digital literacy, and holistic learning opportunities within and beyond classrooms.

UNICEF's <u>Learning Passport</u> is a highly flexible digital education platform and supporting ecosystem that can be adapted to meet the specific needs of learners and educators – from foundational learning to skills development – across different contexts including formal and non-formal education settings. The Learning Passport is live in 36 countries with over 5.6 million users.

C7. ICT Applications: e-Health

UNICEF is collaborating with WHO, the Asian Development Bank and the Asia eHealth Information Network (AeHIN) to update the **Convergence Toolkit**, which is expected to be included in the WHO **Global Initiative for Digital Health (GIDH) Digital Transformation Toolbox**. This Toolkit is currently being used to support countries to develop Digital Health Blueprints and Operational Roadmaps, including aligning these to health sector specific strategies and multi-sectoral digital transformation initiatives, assessing the health sectors digital maturity and readiness, validating health reference architecture and standards, costing and prioritizing key investment areas (including in policy, human resources and infrastructure), and coordinating government and partner investments.

eLearning solutions for health service providers: Many low- and middle-income countries (LMICs) have been facing acute shortages and inequitable distribution of skilled health workers that impact the delivery of essential health services. Currently, the health workforce training curricula is focused on building competencies primarily during pre-service training. However, in order to empower health workers with the right competencies to deliver safe and effective services, a combination of both preservice training and continuous in-service training that reskills and upskills the health workforce is optimal. Thus, UNICEF began the Remote Health Worker Training (RHWT) Initiative to support the learning and performance of the frontline health workers. To date, 14 UNICEF country offices across 3 regions have deployed RHWTs to upskill ~17,000 nurses, community health workers and midwives to respond to the COVID-19 pandemic. Various digital platforms such as Moodle, WhatsApp, SMS, Internet of Good Things, and Telegram were leveraged for these trainings, that are now transitioning to be focused on additional health topics such as routine immunizations, maternal and child health, and mental health.

UNICEF's **remote health worker training initiative** supports the development and deployment of opensource and vetted high-quality digital educational content that targets health workers. Using a country's existing digital platforms, content on COVID-19, routine immunization, mental health, cold chain management, and digital literacy have been deployed. These digital educational content assets are available in workflows that any country office can localize and adapt to their context and deploy on the platform of their choice.

<u>RT-VaMA</u>: UNICEF created a Real-time Vaccination Monitoring and Analysis (RT-VaMA) tool to help governments better plan, implement and evaluate immunization campaigns. By creating access to reliable data that helps governments and partners identify the children who are missing out digital technologies are offering solutions to close the vaccination gap. UNICEF is supporting the scale-up of digital health solutions through RT-VaMA helps rapid scale-up of immunization campaigns so that governments can reach the under-vaccinated or zero-dose children faster and more efficiently, as it allows health workers to collect data electronically and upload it on a daily basis. RT-VaMA has been successfully piloted in the Philippines and in Papua New Guinea.

<u>OKY Philippines</u>: Oky Philippines, developed on Oky by UNICEF, is a menstruation education and period tracker app. The new app is a joint project of the Philippines Department of Education (DepEd), the Philippines Department of Health (DOH), the Philippines Commission on Population and Development (PopCom), the Philippines National Youth Commission (NYC), and UNICEF. It is specialized to the context of Filipino girls. The project team consulted with girls living with different backgrounds across the Philippines. These included indigenous peoples, out-of-school youth, and children with disabilities.