

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

**Twenty-fourth session  
Geneva, 17 to 21 May 2021**

**Submissions from entities in the United Nations system, international  
organizations and other stakeholders on their efforts in 2020 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 24<sup>th</sup> 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.

**DISCLAIMER:** The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.

## UNICEF WSIS Report 2020

UNICEF's reporting for 2020 focuses on the reporting template **Part Three: Innovative policies, programmes and projects** which have been undertaken, and future actions. Of the more than 1,500 digital-supported initiatives being undertaken by UNICEF, approximately 70% of those are currently in the stages of piloting, evidence generation and/or scaling across the globe in support of ICT-enabled digital programming solutions. Below are highlighted initiatives contributing to UNICEF-supported government programmes, policy and evidence.

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

#### **Artificial intelligence and child rights**

Children are using digital tools that utilize artificial intelligence (AI) systems – from social media face filters and content recommenders to language translation apps – or are being impacted by AI systems employed in social welfare, education and other sectors. To help create environments that support the safe and beneficial use of AI systems for children's development, UNICEF, in partnership with the Government of Finland and other organizations part of [Generation AI](#), has developed draft [policy guidance](#) for governments, businesses, the non-profit sector and the Organization itself. Globally, almost 250 children and over 200 experts were consulted to inform the guidance. Once launched, UNICEF held a public consultation on the guidance (receiving 50 inputs) and invited all governments and companies to pilot the guidance and openly share their findings about how it was used, and what worked and what did not. In this spirit, UNICEF will work with a diverse group of 13 government and business pilot organizations to document in 2021, as case studies, their findings of their implementation of the guidance.

#### **Good data governance for children**

UNICEF is bringing together 19 global experts in a project to explore trends in the governance of children's data, including the tensions between different rules and norms, emerging concepts and practice, and implications for policy and regulation. Debate on the future of children's data affects a diverse range of issues, including data ownership and control, data fiduciaries, profiling for digital marketing purposes, child-friendly privacy notices, data erasure upon request, age verification, parental responsibility, data protection by design and default, algorithmic bias, and individual and group data. The project aims to highlight the gap between the world we want for children and today's reality, developing a manifesto on how children's data could be optimally managed and what steps need to be taken. To help develop this manifesto, members of the working group will publish short analyses of different approaches to data governance. A draft version of the manifesto will be shared for public consultation in order to come to a more robust version before the end of 2020.

#### **Accelerating action for child online protection in ASEAN**

In November 2019 the ASEAN Heads of State adopted the [Declaration on the Protection of Children from all forms of Online Exploitation and Abuse in ASEAN](#) providing the first specific regional commitment and framework on child online protection. Subsequently, ASEAN and the Governments of the Philippines and Thailand, with support from UNICEF, UNODC and ITU brought together over 200 delegates from 10 Governments, private sector, NGOs, academia and UN agencies, representing social welfare, justice, education, telecommunications, tech, social media and finance sectors, for the first

ASEAN Regional Conference on Child Online Protection (25-27 February) to identify key actions to ensure that no child has to suffer online exploitation and abuse.

## 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: A “GAVI for Gigabytes”**

“GIGA” is a new initiative by UNICEF and ITU to connect every school to the internet, and every young person to information, opportunity and choice. GIGA is anchored in the Secretary-General's High-level Panel on Digital Cooperation's findings 1A and 1B which state, respectively, that by "2030 every adult should have affordable access to digital networks" and calls for "a broad, multi-stakeholder alliance, involving the UN, create a platform for sharing digital public goods." Giga is currently working with 11 countries to connect over 86,000 schools and more than 25.8M students and teachers.

## C3. Access to information and knowledge

### **COVID-19 Information**

As part of U-Report's COVID-19 response the U-Report Global team developed a COVID-19 Information Chatbot which distributed life-saving information, collected information about rumors and misinformation spreading in communities. Over 50 countries deployed the Chatbot and, alongside U-Report's COVID-19 polling efforts, the response reached over 6 million young people and communities while providing 25 million responses to inform programmatic interventions by UNICEF and its partners.

## C4. Capacity building

### **Responsible Data for Children**

The initiative, by UNICEF and NYU's GovLab, seeks to build awareness regarding the need for special attention to data issues affecting children—especially in this age of changing technology, data linkage and AI; and to engage with governments, communities, and development actors to put the best interests of children and a child rights approach at the centre of our data activities. Drawing upon field-based research and established good practice, RD4C aims to highlight and support best practice in our work; identify challenges and develop practical tools to assist practitioners in evaluating and addressing them; and encourage a broader discussion on actionable principles, insights, and approaches for responsible data management.

## C5. Building confidence and security in the use of ICTs

### **Measuring the impact of birth registration initiatives in West and Central Africa**

West and Central Africa has the lowest birth registration rates in the world, with only 45 per cent of children under 5 years registered. UNICEF carries out birth registration initiatives across the region. To measure the results and impact of those interventions, and to generate real-time data for countries to use in planning and monitoring civil registration service performance, UNICEF has supported the development of a routine data collection system powered by RapidPro that has increased the availability of real-time data on birth registration. The resulting dashboard has considerably increased the availability and analysis of real-time data on birth registration. In 2019, birth registration using mobile technology and realtime monitoring approaches was tested in selected regions of Benin, Cameroon, Guinea-Bissau, Mali and Senegal. Early evidence indicates that the initiative is helping to realize the rights of thousands of children to a name and legal identity.

## C7. ICT Applications: e-Government

### **Enhancing social protection systems using real-time monitoring in Jordan**

UNICEF Jordan is working with the National Aid Fund to pilot the use of real-time monitoring through RapidPro to facilitate the expansion of the Hajati Program – also known as the Integrated Social Protection Programme for Children in Jordan. Hajati aims to increase school enrolment and decrease school drop out among vulnerable families in Jordan through the use of cash transfers. RapidPro is allowing UNICEF and partners to improve project monitoring, strengthen accountability to beneficiaries – including through feedback and complaint mechanisms – and expand behaviour change communication. To date, more than 855,000 children and nearly 315,000 families have been reached through Hajati real-time monitoring efforts.

## C7. ICT Applications: e-Health

### **Supporting communities in India to become open defecation free**

The Government of India launched the Swachh Bharat Mission (Clean India Mission) in October 2014 with a goal of achieving a clean India by October 2019. Initially, project monitoring only covered the number of toilets constructed, with little information generated on the quality of service delivery. As a result, some households received toilets that they were unable to use, jeopardizing the achievement and sustainability of open defecation free outcomes. In 2018, UNICEF partnered with the Government to strengthen national capacity to monitor the delivery of WASH services using RapidPro. The evidence gathered through RapidPro is being used to improve social accountability, inform the design of future initiatives and scale up WASH innovations across the country. To date, the initiative has directly benefited nearly 146,000 adults and over 97,000 children, and indirectly benefited.

### **Mobile period tracking app for and by girls in LMICs**

UNICEF is pioneering the design of digital solutions that are built to girls' digital realities in LMICs and help close the gender digital divide for girls. The UNICEF supported GirlTech flagship initiative, the Oky app, is uniquely designed with and for girls, to empower them with menstruation education and cycle tracking in creative and positive ways, functioning online and offline on the devices they use. Girls co-created the digital tool and informed everything from Oky's technical specifications, gamified features and content to its look and feel. Since its launch in May 2020 in the pilot markets Mongolia and Indonesia, the Oky app has over 35,000 active users. Oky is now in scaling phase, and currently being localized for the Kenya and Mexico markets with partners across sectors and industries.

## C7. ICT Applications: e-Learning

### **Identifying opportunities and challenges for digital learning in sub-Saharan Africa**

Globally, and especially in sub-Saharan Africa, UNICEF's primary experience using technological innovations in education is for real-time monitoring – administrative tasks that track quality education indicators via mobile phones. As technology becomes more flexible and cheaper to deploy, opportunities to leverage technological tools and platforms for learning are also growing. However, despite the many opportunities that technological innovations can bring for learning, UNICEF's Eastern and Southern Africa and West and Central Africa regional offices lacked clear guidelines on how and where ICTs can add the greatest value for children in learning outcomes. A paper was developed 'Raising Learning Outcomes'. In the project's second phase, partners have created tools and resources useful for national and sub-national policy and decision makers, school leaders, educators and other organizations and stakeholders invested in the education ecosystem to help them act on the research findings which has been launched in 2020.

### **Bringing solutions to Ukrainian children with dyslexia**

Dyslexia - which affects between 10 and 20 per cent of people in Ukraine – is a learning disorder that makes it difficult to process and interpret written symbols. UNICEF is supporting the Government of Ukraine to make education more inclusive and responsive to the diverse needs of children, including those with disabilities. In the summer of 2019, working closely with the Ministry of Education and implementing partners, UNICEF created the first Cyrillic type font for people with dyslexia, “Inclusion\_UKR”. The product consists of letters, numbers and punctuation marks that can be used in language learning or in general literature. To date, 74 children with dyslexia have been reached through pilot testing with positive results. UNICEF is also finalizing an agreement with the Kyiv City Metro system to help make subways more accessible to millions of passengers by doing what?

### **Support to creators, innovators and providers of digital sexuality education**

In East Asia Pacific, UNICEF has spearheaded the exploration of digital sexuality education and sparked a global conversation on harnessing digital media to deliver age-appropriate, evidence-based and engaging sexuality education content to young people, complementing in-person delivery of CSE in and out-of-schools. UNICEF supported the global forum on digital sexuality education “Switched On” organized by Unesco in February 2020.

## **C7. ICT Applications: e-Business**

### **Children’s Rights and Business**

UNICEF continued to build initiatives related to children’s rights and business within the ICT sector in 2020. This has included analyzing and raising awareness of the implications of COVID-19 on the sector’s responsibilities towards children’s rights (see [‘Ten Core Messages’](#)). July marked the publication of UNICEF’s [‘Recommendations for the Online Gaming Industry on Assessing Impact on Children’](#) designed to guide and support online gaming companies through a process of incorporating child rights considerations throughout their business activities. They build on a [UNICEF Discussion Paper on Online Gaming and Child Rights](#) published in 2019 and set the scene for further engagement in 2021. The Recommendations benefitted from extensive inputs from various industry actors, including industry associations, several of whom presented at the [public launch of the guidance](#). This year, UNICEF has also initiated a process of updating child rights guidance for Mobile Network Operators as well as conducting research on children’s rights and age verification online. These areas of work will continue to be developed throughout 2021.

## **C10. Ethical dimensions of the Information Society**

### **Research paper: Digital Contact Tracing and Surveillance During COVID-19: General and Child-specific Ethical Issue**

The response to COVID-19 has seen an unprecedented rapid scaling up of technologies to support digital contact tracing and surveillance. In this context, digital technologies to enhance contact tracing and public health surveillance may be useful complementary tools - as the more we know about the outbreak, the better we can contain the outbreak and mitigate its impacts. The application of these technologies however raises risks. Although these digital risks are not wholly new, they are unprecedented in terms of speed, scale and invasiveness. Further, there are more and varied players making decisions about how this data, including children's data, are being used and how related risks are being assessed and handled. This implies a need to engage with a broader set of government and industry partners to ensure that children's rights are not overlooked. UNICEF’s paper examines these issues from an ethical perspective.

## Evidence and policy

### Evidence generation on children's digital lives and what works for education and behavior change online

UNICEF EAPRO launched two new groundbreaking pieces of research in February 2020. [\*Our Lives Online: Use of social media by children and adolescents in East Asia – opportunities, risks and harms\*](#) is a snapshot of children's use of social media in East Asia, focusing on four countries: Cambodia, Indonesia, Malaysia and Thailand carried out by UNICEF EAPRO and the Centre for Justice and Crime Prevention. The research captures the experiences and perceptions of children across the four countries, and provides a voice to children not usually included in this type of research - children living on the streets, children in institutional care, refugees and children with disabilities. The research was one of the winners of Best of UNICEF Research and Evidence 2020.

More and more funding is being invested by the UN, Governments, NGOs and the ICT sector to equip children with knowledge and skills and to change their behavior online as one critical intervention to mitigate online risks. The review – [\*What Works to Prevent Online and Offline Child Sexual Exploitation and Abuse: A review of national education strategies\*](#) - explores what works to prevent abuse and exploitation through education strategies in order to guide the development and delivery of messaging and education materials.

### Research on online violence, sexual exploitation and abuse

Nationally representative surveys with children and their parents on their experiences of online violence, sexual exploitation and abuse is currently being undertaken by UNICEF in 14 countries across Eastern & Southern Africa and South-East Asia, under the new [\*Disrupting Harm\*](#) project. Additionally, UNICEF is working on an 11-country study of European children's use of digital technology during the COVID-19 pandemic, coordinated by the European Commission's Joint Research Centre. Results forthcoming in 2021.

## UNICEF programmes and field implementations

### Voices of Youth

UNICEF's Voices of Youth platform continues to be a valued safe space for young people to express themselves through creative forms – writing, poetry, photography and illustration. Through the COVID-19 pandemic, the platform has been particularly relevant, reaching more than 3M web visits (230% growth year over year) and 400k digital supporters on social media, including a newly launched Instagram account with 10k followers. VoY content is often translated and adapted by other UNICEF channels around the world. Taking action on COVID-19, mental health, climate change, education and online safety were some of the key content areas of the VoY platform this year.

### #ENDViolence online activities

For Safer Internet Day 2020 and in the lead up to the ASEAN Regional Conference on Child Online Protection in February 2020, UNICEF EAPRO launched a series of 6 PSAs to raise awareness of online risks and to call for action across different sectors and duty bearers tailored to the region. Our Regional Ambassador Siwon Choi was the face of the campaign. His involvement significantly increased its reach through both UNICEF's platforms and his own social media accounts. The PSAs covered grooming, self-

generated images, cyberbullying, being kind online, protecting your information online and a call to action. All PSAs can be found on EAPRO's [Facebook page](#) (video section).

### **Safer chatbots**

Chatbots are often being used to provide vital health information to young people, and especially during the Covid-19 pandemic, chatbots have become a channel of choice for organizations to disseminate information. While these automated services are often designed for engagement on specific topics only, users may try to get help on other subjects by messaging the chatbot and disclosing personal details, including gender-based violence (GBV) or mental health. Users attempting to disclose their situation to chatbots in an attempt to seek help, often receive no acknowledgement or support. The 'Safer Chatbots' initiative, led by UNICEF EAPRO Gender Section in collaboration with HQ Child Protection, is creating a set of mechanisms and guidelines to improve the ability of all chatbots to detect disclosures of gender based violence and to trigger a well-crafted automated response flow, including contact information for GBV support services.

### **U-Report**

Originally a mobile phone-based social messaging tool engaging young people as positive agents of change – today U-Report also functions on digital channels outside mobile phones, for example Facebook Messenger, Viber, and WhatsApp. U-Report is adapted to the local context in the 75 countries where it operates, customized on the needs and priorities of youth and their civil society allies. In each case it provides essential information to young people and communities (in their local languages), and it works to increase civic engagement with the ultimate goal of achieving positive change for children, youth and families. In 2020 U-Report scaled from 8 million users in 65 countries to 12 million users in 75 countries.

### **Online safety**

On Safer Internet Day 2020, UNICEF joined forces with popular social platforms and online protection experts to answer young people's top questions about cyberbullying. Our [web article with the top 10 questions and answers](#) received high levels of engagement, and our content was amplified by [GWA Millie Bobby Brown](#), TikTok celebrities Charli and Dixie d'Amelio ([whose video generated 12 million views across our platforms and channels](#)), National Ambassadors and other global influencers.

Following the outbreak of the COVID-19 pandemic, the #ENDviolence team worked closely with cross-divisional colleagues to develop a joint [technical note](#), [press release](#) and [social media messaging](#) driving to a web article on online safety during the pandemic. On social media channels, we also spotlighted the work of a young person who has developed an app to [combat cyberbullying](#) and [news stories](#) on the impact of the pandemic on online safety. We also facilitated two global webinars for UNICEF staff to introduce the briefing and policy recommendations, and highlight country-level examples.