

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

**Twenty-first session
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**Submissions from entities in the United Nations system and elsewhere on
their efforts in 2017 to implement the outcome of the WSIS**

Submission by

United Nations Educational, Scientific and Cultural 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 21st 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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United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织

**The Assistant Director-General
for External Relations and Public Information**

Mr Mukhisa Kituyi
Secretary-General
United Nations Conference on Trade and
Development
Palais des Nations
CH-1211 Geneva
Swiss Confederation

3 January 2018

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Dear Mr Kituyi,


On behalf of the Director-General, I wish to thank you for your letter of 2 November last, by which you invite UNESCO to provide a contribution to the Secretary General's Report on the implementation of outcomes of the World Summit on the Information Society (WSIS) during the current year of 2017.

I am pleased to enclose herewith the requested contribution, which focuses specifically on the following Action Lines, for which UNESCO is among the facilitators of their implementation: C3 - Access to information and knowledge; C7 – ICT Applications for e-Learning and e-Science; and, C8 - Cultural diversity and identity, linguistic diversity and local content.

As suggested in your letter, this document is also being sent by e-mail to Ms Shamika N. Sirimanne, Director of the UNCTAD Division on Technology and Logistics and Head of the Secretariat of the Commission on Science and Technology for Development.

UNESCO remains at your disposal for any further information you may require.

Yours sincerely,



Eric Falt

**Report by UNESCO on its role and activities in implementing the WSIS
Outcomes (2017)**

**Contribution to the Report for the
Commission on Science and Technology for Development (CSTD)**

December 2017

Part One: Executive Summary

CSTD 2017 Guidance: “An executive summary (half a page) of activities undertaken, progress made, and any obstacles encountered.”

UNESCO supports Member States to build inclusive Knowledge Societies. The Organization relies upon multi-disciplinary comparative advantages through a range of programme activities aligned to the 2030 Agenda for Sustainable Development and the WSIS+10 outcomes in 2017.

Information and Knowledge Societies embrace a vision of inclusive, open, diverse and participatory approaches that are demonstrated to impact positively quality education, economic prosperity and poverty eradication, social inclusion and environmental protection, thus contributing to the three UN pillars of human rights, peace and sustainable development.

New challenges, threats and opportunities continue to emerge amidst the global information and technological revolution. The gender gap in access to the benefits of Information and Communications Technology (ICT) must be addressed through appropriate policies, capacity building and education. UNESCO’s [Internet Universality](#) concept and associated indicators are key instruments to counter challenges and maximize opportunities.

Part Two: Analytical Overview of Trends and Experiences

Initiatives for 2017 cover WSIS Action Lines by bringing to bear the breadth of UNESCO’s multi-sectoral mandates. Quality education for all, freedom of expression, universal access to information and knowledge, and respect for cultural and linguistic diversity remain among UNESCO’s highest programmatic goals moving forward to support the 2030 Agenda.

In WSIS Action Line C3 (Access to Information and Knowledge), the second annual commemoration of the 28 September [International Day for Universal Access to Information](#) (IDUAI), offers excellent opportunities for Member States to draw attention to mainstreaming one of the central pillars supporting overall SDG achievement. Other major UNESCO led events in 2017 included the [2nd World Open Educational Resources \(OER\) Congress](#), which brought together delegates and experts from more than 110 countries to adopt the [Ljubljana OER Action Plan and accompanying Ministerial Declaration](#), highlighting OER’s transformative potential, reinforced by the expansion of ICT and broadband infrastructure.

UNESCO commemorated the [2017 United Nations International Day of Persons with Disabilities](#) (4 December) including through year-long advocacy and partnerships focused on the role of inclusive arts in creating sustainable and resilient societies, where persons with disabilities are entirely integrated among the main actors.

In Action Line C7 (ICT Applications for e-Learning and e-Science), the [Qingdao Declaration \(2015\) on leveraging ICT for Achieving Education 2030](#) has provided a framework to guide implementation strategies for leveraging ICT to help reach SDG targets. Mobile technologies are making e-learning more inclusive, more accessible and more equitable. UNESCO supports

countries in planning and implementing projects on how to leverage Mobile Learning for literacy education and supporting teachers to obtain ICT competency.

To support Action Line C8 (Culture), UNESCO has increasingly integrated ICTs throughout its programmatic work in the field of culture. Actions to protect and promote tangible and intangible cultural heritage, linguistic diversity, the diversity of cultural expressions, and the cultural and creative industries, were undertaken with and benefitted from ICT.

As the facilitator of WSIS Action Line C9 (Media), UNESCO has continuously engaged with global multi-stakeholders and partners to implement core tasks of Action Line C9 by fostering freedom of expression online and offline and strengthening free, independent and pluralistic media at global, regional and national levels in 2017. UNESCO has joined efforts with all stakeholders toward defining Internet Universality Indicators, as well as to implement Internet Universality R.O.A.M principles (Rights, Openness, Accessibility and Multi-stakeholder participation). This takes the form of numerous and successful partnerships that have been built up, facilitated by major UNESCO and United Nations events including the Internet Governance Forum, WSIS Forum and World Press Freedom Day.

Part Three: A brief description of:

Access to Information and Knowledge (Action line C3)

Since the UNESCO General Conference adopted resolution 38 C/70 (2015) declaring 28 September as the [International Day for Universal Access to Information](#) (IDUAI), UNESCO has commemorated the International Day by organizing events around the world to advocate public access to information, the protection of all fundamental freedoms. IDUAI has particular relevance for the 2030 Agenda, and in particular SDG target 16.10.

From 27 to 30 September 2017, Mauritius hosted IDUAI commemoration on the theme of *“Overcoming Divides: Achieving the SDG’s in Africa”*. The event brought together high-level participants from all of the 54 African countries and was organized in partnership with the UNESCO Information for All Programme (IFAP) and eLearning Africa.

In commemoration of IDUAI at UNESCO Headquarters on 28 September, the [International Programme for the Development of Communication](#) (IPDC) hosted *“IPDCtalks: Powering Sustainable Development with Access to Information”*. Attended by more than 350 people from all WSIS stakeholder groups and streamed live across the world, the *IPDCtalks* highlighted the essential role that access to information plays in the SDGs. The event, organized in partnership with UNESCO’s Information for All Programme (IFAP), consisted of a series of dynamic talks from global public leaders, prominent journalists, young intellectuals and community leaders.

Additional 2017 IDUAI-related events were organized in a number of countries, beginning in Tunisia, on 25 September, with an *IPDCtalks* panel event gathering 250 participants to discuss progress and new initiatives around Tunisia’s Access to Information law. The event also was an opportunity to launch a new Swiss-funded UNESCO project to facilitate coordination among Civil

Society Organizations to implement the law in Tunisia, one of eight countries where *IPDCtalks* were held.

At the WSIS Forum, UNESCO presented “*Access to Scientific Knowledge, Lessons learnt and the way forward*”. The panel highlighted how Open Access and Open Data are enablers for Science, Technology and Innovation (STI), which have helped to close the digital divide for information and knowledge among producers and consumers.

At WSIS 2017, UNESCO elaborated and presented the framework of its *Internet Universality indicators* during the High Level Session on “*Defining Internet Universality Indicators and Access Policies to support the implementation of the 2030 Agenda for Sustainable Development*”. UNESCO also presented its *Knowledge Societies policy template* that offers concrete options for Member States to formulate and adopt appropriate policies at national level.

In 2017, UNESCO also organized the Action Line C3 workshop session on the theme “*Is Software the Key to Access to Knowledge in the Digital Age?*” The workshop engaged experts, educators, academics in a broader consultation on software preservation and sharing, following the signing in April 2017 of an [agreement between UNESCO and INRIA](#), editor of the “*Software Heritage Project*”, focused on software preservation and the sharing of its source code. This project has two main objectives: first to favor access to and learning of software code for the purposes of education, digital literacy skills and pedagogical approaches; and second to ensure continuous access to digital resources (which include the source code itself).

ICT Applications for e-Learning and e-Science (Action Line C7)

As a follow-up to the [Qingdao Declaration \(2015\) on leveraging ICT for Achieving Education 2030](#), UNESCO convened the second International Conference on ICT and Education 2030, which adopted the [Qingdao Statement \(2017\)](#) designed to guide implementation strategies for unleashing the potential of ICT to help reach the SDG-4 targets.

UNESCO and Intel partnered to launch in 2016 the [Global ICT in Education Policy Platform](#) to facilitate the on-going policy debates on leveraging e-learning to promote quality education and to advance inclusion, equity and gender equality. More than 50 countries have developed or updated their national ICT in education policies and master plans with a view to promote e-learning for all with the direct support of UNESCO.

Through the Broadband Commission for Sustainable Development, UNESCO established a Working Group on Education in 2016, which published its report on “[Digital Skills for Life and Work](#)” (September 2017) designed to guide Member States in defining digital skills and mainstreaming strategies to support sustainable and equitable development.

In follow up to the [2012 Paris Declaration on OER](#), UNESCO organized the 2nd World OER Congress in Ljubljana, Slovenia, which adopted the 2017 and Ljubljana OER Action Plan accompanying

Ministerial Statement. The Ljubljana OER Action Plan, adopted by acclamation by delegates and experts from 111 countries, presents 41 recommended actions to mainstream open-licensed resources to help all Member States to build Knowledge Societies and achieve the 2030 SDG 4 on “*quality and lifelong education.*” In 2016-17, UNESCO provided assistance to more than 20 countries in supporting the development of national policies and strategies for adopting OER, and published case studies on OER projects of 15 countries.

UNESCO is currently finalizing the ICT Competency Framework for Teachers (ICT CFT) Version 3. ICT CFT outlines a set of competencies that teachers need to integrate ICT into their practice and professional development to advance student learning. Version 3 will integrate emerging trends in technology, including Social Network, E-safety and E-ethics. Inclusion of issues related to accessibility for Persons with Disabilities and OER is foreseen as well. The ICT CFT implementation supported through the development of openly licensed materials adapted to national contexts has been developed by over 10 countries, with the support of UNESCO. A dedicated hub for OER linked to the ICT CFT has been developed and is available at <https://www.oercommons.org/hubs/UNESCO>.

Through its annual [Mobile Learning Week](#), UNESCO has been organizing capacity building workshops, symposiums, policy forums and strategy labs to help governments and other stakeholders discover ways to harness the power of widely-available mobile technology and other technological advances including Artificial Intelligence. UNESCO also supports countries in planning and implementing projects on how to use mobile learning for literacy education and [supporting teachers with mobile technology](#).

Through the [UNESCO King Hamad Bin Isa Al-Khalifa Prize for ICT in Education](#), UNESCO has identified and brought attention to innovative approaches around the world in e-learning. The most recent [prize-winning laureates](#) (2016), from Bangladesh and Germany, addressed the theme of “*ICTs in Education for Disadvantaged Groups*”.

The UNESCO [Sandwatch project](#) is implemented in coastal regions in Africa, Latin America, the Caribbean and the Asia-Pacific regions, in the framework of the citizen science global observatory. Sandwatch enrolls young people, their parents and communities in the protection and preservation of their coastal areas, including their related waterways and wetlands, applying an approach called MAST (“Measure, Analyze, Share, Take action”).

Recent ICT-led innovations in environmental sensing, data processing, interactive visualisation show promise for participatory knowledge generation. UNESCO and its partners are implementing [Mountain-Environmental Virtual Observatories](#) (Mountain EVO) in Peru, Kazakhstan, Nepal and Ethiopia.

UNESCO supports and was involved in creating and advancing the [Smart Campus Cloud Network](#) (SCCN) for Sustainable Development. The SCCN integrates ICTs, IOT and AI to create a global network, committed to make a tangible contribution to SDGS ‘learning by doing’ approach to empower youth to carry out activities using modern technologies.

In the framework of Libyan self-benefitting Funds-in-Trust, high-ranking representatives of 18 Libyan universities throughout the country have developed nine OERs on academic subject areas such as medical clinical skills, renewable energy, civic culture and environmental pollution. UNESCO also is implementing a self-benefitting Funds-in-Trust project in Libya on Open Access to Scientific Research and Development. The large-scale Project launched in 2016 is developing an Open Access policy framework to help bridge scientific knowledge divides and build capacities at multiple levels.

Cultural diversity and identity, linguistic diversity and local content (Action Line C8)

UNESCO's "[Global Report: Reshaping Cultural Policies, Advancing Creativity for Development](#)" was launched in December 2017 in the framework of the [2005 Convention for the Protection and Promotion of the Diversity of Cultural Expressions](#). The report examines developments and best practices on the use of digital and interactive content and technology in the cultural and creative industries, as well as the elaboration of policies thereon.

In June 2017 the Conference of Parties to the 2005 Convention adopted new operational guidelines for implementation in the digital environment. The guidelines provide a strategic framework for understanding, interpreting and implementing the 2005 Convention in a digital environment, where cultural goods and services are created, produced, distributed, disseminated, consumed and/or stored electronically.

Within its [global capacity-building strategy](#), the Secretariat of the [2003 Convention for the Safeguarding of the Intangible Cultural Heritage](#) developed a large set of pedagogic materials on different aspects of the intangible heritage safeguarding, which are available in several languages free of charge on the [Convention's webpage](#).

The use of ICT for the museum sector includes initiatives focused, in particular, on the digitization and organization of online collections and inventories. The [2015 UNESCO Recommendation concerning the Protection and Promotion of Museums and Collections, their Diversity and their Role in Society](#) addresses the issue of ICTs and acknowledges the key role they play in providing opportunities to museums in terms of preservation, study, creation and transmission of heritage and related knowledge.

UNESCO and the Victoria and Albert Museum London organized a roundtable held at the Organization Headquarters in May 2017 to address the use of ICTs from the perspective of reproduction of art and cultural heritage. This marked the launch of a new initiative "*Reproduction of Works of Art and Cultural Heritage*" ([ReACH](#)), which aims to re-contextualize the reproduction of cultural heritage in response to the global advent of ICTs.

UNESCO was a partner to [MuseumWeek 2017](#), organized in cooperation with the NGO Culture for Cause. A successful international social media event, it mobilized more than 4,000 museums worldwide from 95 countries.

The [#Unite4heritage](#) campaign, a global movement powered by UNESCO and entirely run online, targets youth through news and social media. Videos, photos and anecdotal content is shared to celebrate and safeguard cultural heritage and diversity around the world.

Since the signature of a Memorandum of Understanding in June 2015, UNESCO and the Operational Satellite Applications Programme (UNOSAT) of the United Nations Institute for Training and Research (UNITAR) are cooperating on a regular basis for the monitoring, via satellite imagery, of heritage destruction and damage in Iraq, Syria, Libya and Yemen. Under this partnership UNOSAT provides imagery and imagery analysis to UNESCO, while UNESCO provides advice on the sites that require monitoring, the selection of experts to conduct analyses, and comparative data prior to damages.

The [World Heritage State of Conservation Information System](#), launched in 2012, provides reliable information on the state of conservation of natural and cultural World Heritage properties since 1979 and the threats they have faced in the past, or are currently facing. The system makes available more than 3,400 reports on 547 World Heritage properties. This comprehensive online information system is a vital tool for World Heritage stakeholders and a major source of information for all interested in heritage conservation.

The [1970 Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property](#) continuously works on raising awareness on illicit trafficking through online campaigns. These included 13 audiovisual clips that target the public, tourists and youth. Additionally, within the context of the [#Unite4heritage](#) campaign, and following the success of the mobile application game developed by UNESCO Baghdad Office entitled "[Sarmad the Adventurer](#)" to raise awareness among Iraqi youth on Iraq's cultural heritage and the importance of protecting it against illicit trafficking, "[Sarmad the Adventurer 2](#)" has been launched.

The 1970 Convention Secretariat also maintains an online [Database of National Cultural Heritage Laws](#) providing thousands of cultural laws from 188 countries. This information is regularly updated and open to the public.

The "Canoe Is the People" project uses ICTs to promote indigenous knowledge of the Pacific Ocean environment including traditional open ocean wayfaring. Through audiovisual documentation with Master navigators and canoe builders, as well as animations, images and texts, the "Canoe is the People" website (www.canoeisthepeople.org), available in both English and Maori, offers a vehicle for elders and experts from several Pacific countries to pass on their specialized knowledge, skills and worldviews to Pacific youth.

Media (Action Line C9)

UNESCO and C9 stakeholders have advocated a wide range of cutting-edge issues related to Action Line C9 Media including freedom of expression and privacy online and offline, press freedom, safety of journalists and media actors, gender equality in media, media and information literacy, online hate speech, radicalization, encryption, etc.

In March 2017, UNESCO launched the project “[Defining Internet Universality Indicators](#)”. As part of the methodology for developing the indicators, UNESCO has initiated a global consultation process both online, through a consultation platform available in the six UN languages, and in-person through 26 consultation activities being held in 23 countries. These consultations have helped UNESCO facilitate and expand its partnerships with multiple stakeholders in implementing Internet Universality principles in different countries.

In terms of policy research, UNESCO has released three publications: [Youth and Violent Extremism on Social Media: Mapping the Research](#); [What if we all governed the Internet? Advancing multi-stakeholder participation in Internet governance](#); and [Survey on Privacy in Media and Information Literacy with Youth Perspectives](#).

One of UNESCO’s flagship events, [World Press Freedom Day](#) (WPF), was celebrated on 3 May 2017 with 139 national events around the world. The main event was held in Jakarta, Indonesia (1 to 4 May) under the global theme of [Critical Minds for Critical Times: Media’s role in advancing peaceful, just and inclusive societies](#). The event gathered 1,500 participants from over 90 countries, making it the most attended WPF to date. At the close of the conference, participants adopted the [Jakarta Declaration](#), which addresses three major challenges to press freedom, namely false news, safety of journalists, and freedom of speech on the Internet.

The International Programme for the Development of Communication (IPDC) supports an extensive range of projects in developing countries worldwide. 2017 saw 57 media development projects from around the world, supported by the IPDC through financial allocations during its Bureau meeting held in March 2017. Bureau members were able to assess progress on projects recently launched through IPDC, such as the [Post COP 21: Strengthening media capacity to monitor and report on climate change in Asia Pacific](#) (supported by Malaysia); [Defining Internet Universality Indicators](#) (supported by Sweden); [Journalists and Media – Governance in the Gambia \(supported by the European Union\)](#), and [Training judicial authorities in Africa on freedom of expression and the safety of journalists through a Massive Open Online Course \(MOOC\)](#) (supported by Denmark).

Member States, UN, intergovernmental organizations, non-governmental organizations, media and professional associations and members of academia gathered for the 2017 edition of the [Multi-Stakeholder Consultation on Strengthening the Implementation of the UN Plan of Action on the Safety of Journalists and the Issue of Impunity](#) (Geneva, 29 June). They assessed their

achievements, considered the future and shared best practices. The Consultation was organized by UNESCO and the United Nations Office of the High Commissioner for Human Rights (OHCHR) and it gathered more than 90 participants.

On 2 November, UNESCO marked the International Day to End Impunity for Crimes against Journalists (IDEI). Thirty (30) events were organized in 27 countries, including a regional conference in Nairobi, Kenya, and an event at United Nations Headquarters in New York. UNESCO also launched a global media and social media campaign on the subject resulting in 246 articles on the issue of impunity for crimes against journalists all around the world. The 2017 IDEI main event was organized in Colombo, Sri Lanka (4 December) by UNESCO and the Sri Lankan authorities, with the participation of key national and regional stakeholders including the representatives of Asian National Human Rights Commissions.

UNESCO continued its work on the flagship series [World Trends in Freedom of Expression and Media Development and issued a new edition in 2017](#), to monitor global and regional developments related to media freedom, pluralism, independence and safety of journalists. With a special focus on gender equality in the media, the 2017 report provides a global perspective that serves as an essential resource for UNESCO Member States, international organizations, civil society groups, academia and individuals seeking to understand the changing global media landscape.

Good community media practices and policies continue to be fostered. The project “[Empowering Local Radio Stations with ICTs](#)” has continued to consolidate the capacities of local radio stations to provide low-income populations, especially women and girls, access to information and foster their active participation in the public debate on development issues of local concern. The project is now benefiting 59 stations in 10 countries. The 2017 edition of World Radio Day (celebrated on 13 February) achieved very strong results, actively catalyzing global attention through a strong social media campaign. The [World Radio Day](#) theme, *Radio is You*, resonated with radio stations, civil society and audiences alike, as more than 550 events took place in 110 countries that day.

The [Global Media and Information Literacy Week 2017](#) (25 October to 5 November) reverberated around the world with over 97 events in 40 countries, heightening public awareness. The feature conference in Jamaica gathered around 250 participants from over 40 countries. A key outcome of the Global MIL Week Youth Agenda Forum was the *MIL CLICKS Pact*, a self-commitment to engage in critical thinking and influencing peers in this regard online and offline.

For the Commission on the Status of Women (CSW) 2017, UNESCO supported The Global Alliance for Media and Gender (GAMAG) to organize a meeting through which action for gender equality in and through the media became more widely known amongst CSW participants. In 2017, 15 journalism schools have applied UNESCO's Gender-Sensitive Indicators for Media (GSIM).

UNESCO organized [three events](#) during the 2017 WSIS Forum in Geneva covering issues on privacy, encryption and source protection, Internet Universality, violent extremism, fake news and hate speech.

UNESCO organized four events at the 2017 Internet Governance Forum in Geneva, covering issues on Internet universality, Internet governance, big data and artificial intelligence and freedom of expression and media development.

The work on the project to define Internet Universality Indicators is being led for UNESCO by the Association for Progressive Communications (APC), and the draft Internet Universality indicators will be finalized by the end of April 2018. The final indicators will be promoted through WSIS and IGF process, and serve an internationally recognized toolkit to help governments and other stakeholders to assess their own national Internet environments and to promote the values associated with Internet Universality and contribute to achieving SDGs by 2030.
