COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Twenty-seventh session Geneva, 15-19 April 2024

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

International Federation for Information Processing

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.

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.



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

Executive Summary

IFIP is a community comprising more than 3,500 scientists, divided in 13 Technical Committees, each of which includes several Working Groups. In addition, IFIP has an entity called IP3 - The Professional Practice Partnership, which is tasked with creating ICT as a global profession. This is to ensure that the supply-side of ICT, i.e., those who develop and supply digital products are competent, ethical, and trustworthy. IFIP also has Domain committees which horizontally "cut-across" the subject areas of the Technical Committees (i.e., include topical aspects of several TCs). These include domain committees on ICT for Equitable Health and Well-being, and Internet of Things. The Disaster Recovery Domain Committee on IT in Disaster Risk Reduction was started in 2016, and transformed into WG 5.15 in 2020.

The many activities undertaken by the IFIP community are too numerous to cover, but the following must be highlighted:

- Launch of IFIP's Duty of Care in Everything Digital in 2016, which promotes trust and the duty of care that pertains to all that are involved with digital products; from the suppliers to the end users and consumers (AL-C5). The campaign is ongoing, and we promote the concept whenever and wherever possible.
- Creation, launch, and roll-out of the IFIP Code of Ethics (AL-C10). This code is about the
 requirement for all involved in developing ICT and digital products and services to act
 ethically at all times.
- A project called "Sustaining relevant digital inclusive education for young people (5-18 years of age)" was launched in September 2022. Led by Professor Don Passey, Chair of Technical Committee 3 Computers in Education. (AL-C7: Elearning). The project considers key questions that arose from the UNESCO Summit highlighting the need to commit to four areas: addressing educational exclusion; transforming the teaching profession; renewing curricula and pedagogies; steering digital transformation for just and equitable learning. The project is ongoing. Whilst IFIP have been successful in involving the IFIP community in this project, it is a challenge to get broader collaboration.

IFIP has presented more than one Thematic Workshop at every WSIS Forum since 2012.

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.

All of the IFIP workshops at WSIS Forums since 2012 have addressed appropriate action lines. We believe we have demonstrated that the Information Society, usually viewed as the end-users and consumers of ICT products and services, benefit from a trustworthy, professional supply-side of digital products and services. This was a new way of thinking for WSIS, which resulted in a lot of focus on Trust in WSIS forums. The concept of a strong supply-side was perhaps ignored previously, and there must be continued and sustained attention on this in future. ICT is a significant economic



enabler, but when trust is lost, consumers often shy away from using and investing in digital products, which has a detrimental effect on a country's economy.

Trust goes hand in hand with Cybersecurity – cyber-attacks have become more frequent. Despite the shortage of cybersecurity professionals, most organisations have the right skills in place. However, there is a reluctance by companies to report attacks because they are afraid of reputational damage (although the damage is more severe when they are not upfront about it). Sharing information about attacks can put other organisation on guard, and can result in learning for everyone. We believe that it is incumbent on national governments to regulate that attacks must be reported immediately they are discovered. Where possible, Artificial Intelligence/Machine Learning must be used to prevent cyber-attacks.

We believe there should be greater focus on implementing the outcomes and decisions made at WSIS forums. We are pleased that the themes of more recent forums have demonstrated that notice is taken of key issues, but overall, there is often too much talk and not enough action.

It is gratifying that the Sustainable Development Goals have been universally accepted, and are considered by stakeholders in many spheres. The IFIP community of Technical Committees, Working Groups, Domain Committees, and entities such as IP3, now have a strong focus on how their work contributes to the achievement of the SDGs. We can report on this in future years. Consideration must be given to how technology, e.g., generative AI, can be used to accelerate the achievement of the goals. Perhaps it is worth considering which goals are lagging, and focusing on them in future forums, rather than spreading efforts too thinly across all 17 goals.

IFIP took part in Action Line review meetings in December 2013 & February 2014 at ITU, but have not been very involved since then. We were concerned that too much time was taken in reviewing the wording and gaining consensus on this, rather than articulating the activities necessary to achieve the Action Line(s). We also feel that Action Line facilitators could do more to reach out to organisations such as IFIP for assistance with implementation and updating. We present WSIS workshops annually which are aligned with Action Lines and latterly with SDGs, but are not approached for any input to the Action Lines.

Perhaps the WSIS team can also help create partnerships, facilitating introductions between likeminded organisations, to implement and monitor progress? It is left to the individual contributing organisations to develop partnerships, but perhaps ITU, CSTD, or other UN agencies could assist with monitoring these and getting regular reports on progress.

IFIP is a volunteer organisation, with a secretariat staff of only three people. Thus, we are totally reliant on our volunteers. Whilst we deeply appreciate their efforts, we are often hindered by the lack of funds, which can be an obstacle to reaching our goals. We will therefore be seeking sponsorships for particular activities, and funding for projects.



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.
 - The project "Sustaining relevant digital inclusive education for young people (5-18 years of age)", which was described earlier is a significant project, specifically contributes to achievement of SDGs: 4-Quality Education; 8-Decent Work and Economic Growth; 10-Reduced Inequalities, and considers questions arising from the UNESCO Education Summit.
 - As presented at the IFIP IP3 Thematic Workshop at WSIS 2023, we are exploring how generative AI, such as ChatGPT, Bing AI, Google Bard, and DALL-E, can be used to contribute to the Action Lines, and further the achievement of the Sustainable Development Goals.
 Emphasis is placed on the need to protect IP, whilst exploiting the platforms.
 - The IFIP IP3 Global Industry Council (GIC) includes prominent leaders from business, industry, government, academia, and international bodies from countries and organisations representing over 20T USD in market capitalisation and GDP. The Council functions as a think-tank for IFIP, providing guidance on cutting-edge technology issues. It also helps us to support WSIS Action Lines and SDGs, to increase sustained growth in economic development, GDP, innovation, sustainability, and security for all member states of the United Nations and other organisations. The GIC released the free GIC 2020 Skills Assessment Report in September 2015, which considered the skills that would be required in 2020, and how these should be developed. GIC members also have social value programs globally to support WSIS action lines and SDGs including donations.
- (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.
 - IFIP IP3 plan to extend their accreditation activities. Until now, we have accredited member computer societies who meet the requirements for the membership designations at various levels. These levels are aligned to the Skills Framework for the Information Age (SFIA) (for benchmarking purposes only): Level 3 Technologist; Level 5 Professional; Level 7 CIO. Specialisms which can be added include Cybersecurity and Data Science.

 The current IP3 accreditation system is based on ISO/IEC 24773:2008 (Software Engineering), which is the previous version of the 24773 standard. The new ISO/IEC 24773 is totally different from the old standard which was developed as a comparison framework to compare different certification schemes in software engineering. This means that the old 24773 standard did not define any requirements to the certification scheme itself. There was no concept of conformance to ISO standards so that certification bodies need not satisfy requirements defined in the old 24773.

On the other hand, the new ISO/IEC 24773 series is developed as a conformance standard for certification schemes in software and systems engineering. The target domain is expanded to include systems engineering whose domain is defined in INCOSE Systems Engineering Handbook. Furthermore, the notion of conformance is newly introduced so that a certification body needs to satisfy all requirements defined in the new ISO/IEC 24773 series in order to claim conformance to ISO standard.



IFIP IP3 are undergoing a study to examine the feasibility of becoming an accreditation body for ISO/IEC 24773. This will allow us to extend our accreditation activities beyond member societies into software organisations world-wide. It will make a significant contribution to our efforts to ensure trustworthy, competent, and ethical products and services in the digital space, contributing to Action AL C2, C4, C5, C6, C10.

We will be actively seeking funding for this very important project.

• IFIP would like to create a Skills 2030 report (similar to Skills 2020), to examine the future skills needed by everybody to thrive, and mitigate risk against job loss. As before this would be a mostly volunteer activity, but we will seek sponsorship for the project.

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