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

World Economic Forum

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.

World Economic Forum contribution to the annual report of the UN Commission on Science and Technology for Development (UNCSTD) on the implementation of outcomes of the World Summit on the Information Society (WSIS).

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

The digitization of manufacturing, healthcare and agriculture continues, ushering in significant changes in the ways products are made, patients are treated and food is grown. Reflecting these and other industry transformations, the World Economic Forum's Centre for the Fourth Industrial Revolution (C4IR) continued to advance its mission to help stakeholders harness the potential of technological progress for the equitable and human-centred transformation of industries, economies and societies in 2023.

Addressing capacity building and global cooperation, the Forum launched two new Centres for the Fourth Industrial Revolution – in Telangana, India (focused on healthcare and life sciences) and Texas, USA (focused on trustworthy technology) – bringing the total to 18 centres globally.

The Forum's flagship EDISON Alliance initiative which aims to advance digital inclusion by providing affordable access to digital services to 1 billion people by 2025 recorded a positive effect on the lives of 454 million people through 250 initiatives spanning health, finance and education in 90 countries, representing 45% of the 2025 target.

In 2023, the Forum convened communities of purpose and published numerous insight products and white papers across multiple technology domains to shape responsible technology design and deployment (full details in part three).

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.

N/A for the World Economic Forum which is not an action line facilitator.

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.

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

- The World Economic Forum launched the global GovTech network, which aims to accelerate and amplify digital transformation of government to solve public sector challenges, holding its inaugural meeting in September 2023 in Geneva.

- The World Economic Forum developed a [framework](#) that sets out concrete actions and leading examples of public-private collaboration to support governments to achieve their digital transition goals, especially in the face of uncertain economic environments.
- The Forum's C4IR in Azerbaijan developed a roadmap for the country's national artificial intelligence strategy.
- Meanwhile, the centre in Rwanda contributed to the development of the country's [National AI Policy](#), approved by the Cabinet on 24 April 2023.

C2. Information and communication infrastructure

[see EDISON Alliance in part one]

C3. Access to information and knowledge

C4. Capacity building

- The World Economic Forum's Chief Digital Officers community expanded to over 90 C-level digital transformation leaders, working together to accelerate the sustainable digital transformation of industries.

C5. Building confidence and security in the use of ICTs

- Surveying more than 270 experts, the World Economic Forum's [State of the Connected World Report](#) collected insights on major governance gaps and opportunities of internet of things (IoT) to build a connected world.
- The World Economic Forum's Global Coalition for Digital Safety developed a typology of Online Harms via the "Toolkit for Digital Safety Design Interventions and Innovations: Typology of Online Harms". This helps guide a complex range of deliberations, balancing legal, policy, ethical, social and technological considerations.
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C6. Enabling environment

- The Forum's Digital Trade team [identified the main regulatory frictions](#) hindering efficient and inclusive cross-border payments, including diverging regulatory frameworks, anti-money laundering compliance complexities, restrictive data regulations and inadequate access for non-bank players. It proposed recommendations to advance regulatory interoperability through enhanced cross-border collaborations, modernized frameworks, strengthened cooperation and public-private partnerships.

C7. ICT Applications

E-government

- The Forum's C4IR in Japan [demonstrated](#) the importance of agile governance in public procurement of IT, providing an outline of the Japanese process, and the status of implementation in the UK, US, Brazil and India.

E-business

- The World Economic Forum's C4IR Brazil published a [toolkit](#) for manufacturing companies to adopt 4.0 technologies in predictive maintenance.

E-learning

- The World Economic Forum's C4IR UAE launched the [2022 Smart Toy Awards](#) on World Children's Day, attracting 43 solutions of innovators, entrepreneurs, toy

developers and start-ups specialized in various technology sectors from 20 countries around the world.

E-health

- The World Economic Forum's [FIRST Cancer Care](#) initiative laid out a national framework to leverage AI-based early detection of cancer, AR and VR based capacity building of health functionaries and oncology data models in India. In partnership with C4IR India and Apollo Hospitals, the FIRST Cancer care initiative will impact 700,000+ citizens in East Khasi, the district with the highest cancer incidence rates in India.
- The World Economic Forum's [Medicine from the sky: Leveraging drones-based technologies](#) initiative enabled Asia's first long range medical delivery program which is demonstrating successful healthcare outcomes in remote areas (Himalayan belt), impacting 300,000 people. The model is now being adopted by Nepal and 15 other states in India.
- The Forum's Centre in Serbia developed amendments to the Law on Health Documentation and Records to meticulously restructure health documentation and records, and refine the regulatory framework to transform Serbia's medical systems and enable the growth and application of biotechnology solutions.
- the World Economic Forum identified high-priority use cases for public-private collaboration in healthcare and AI, to address critical challenges, such as a shortage of frontline workers, health disparities and escalating spending ([Scaling Smart Solutions with AI in Health: Unlocking Impact on High potential use cases](#))
- In January 2023, the World Economic Forum launched a Centre for the Fourth Industrial Revolution in Telangana, India to focus on healthcare and life sciences. The centre also entered into a partnership with the Wellcome Trust to provide an action-oriented and research-based framework on the impact of climate change on population health.
- The World Economic Forum continued its collaborative work on the Digital Health Action Alliance, which seeks to leverage digital solutions and adopt a systems-change approach to reducing death, disability and inequity from non-communicable diseases.

E-employment

- World Economic Forum white paper *[Jobs of Tomorrow: Large Language Models and Jobs](#)*, presents an examination of the potential impact of large language models (LLMs) on jobs. The integration of LLMs in various industries presents a paradigm shift in how we interact with information and, by extension, how we work.

E-environment

- Pilot data from the World Economic Forum's [FireAId initiative](#) in Turkey demonstrated the ability for the algorithm to predict the location of wildfires up to 24 hours in advance with 80% accuracy. The next phase of the project will scale the pilot across the mediterranean.
- [Digital Solutions Explorer,](#) curated by the World Economic Forum's Chief Digital Officers community supports companies in hard-to-abate sectors (energy, mobility, materials) with "how to" guidance and lighthouse examples on 30+ high impact digital solutions to accelerate their net zero roadmaps.
- The World Economic Forum's C4IR in Norway, HUB Ocean, launched an [Uplink challenge](#) calling for start-ups and social enterprises to propose new ways for ocean data to be used to boost ocean conservation and promote the sustainable blue economy. The 11 winners – ranging from underwater IoT systems to ocean mapping platforms – will receive visibility, training and networking opportunities to help scale their solutions.

E-agriculture

- The World Economic Forum's [AI for Agriculture Innovation (AI4AI) initiative](#) enabled a public private partnership framework to unlock data for agritech innovation, potentially impacting 130 million smallholder and women farmers in India unlocking $65B opportunity. The framework was adopted by Telangana state government, leveraging emerging technologies in Khamman district in the production of chilli plants. The project implementation has already impacted 7,000+ chilli growing farmers through digital solutions like AI based quality measurement, predictive farm based digital advisories to farmers, using IOT and AI for soil measurement and farm to market connectivity solutions.

- In a collaboration with McKinsey and Company, the World Economic Forum's Space Applications in Agriculture initiative looked at the upcoming developments in Earth observation technologies and how these will help transform operations in the agricultural sector, with opportunity to improve food security, save water and help mitigating climate related risks.
- The World Economic Forum's C4IR Saudi Arabia and collaborators launched the Food Ecosystems in Arid Climates [Uplink Challenge](#) as a global call for food entrepreneurs who are generating innovative solutions to achieve food security amidst intensified droughts and desertification and are delivering on the availability, access and management of food on land and sea.

E-science

C8. Cultural diversity and identity, linguistic diversity and local content

- The [Defining and Building the Metaverse Initiative](#) defines the implications of metaverse adoption on individuals, across the dimensions of access and adoption, psychological and physical well-being, DEI, sustainability and economic empowerment. It encourages an international dialogue for strategic development and regulatory guidance.

C9. Media

C10. Ethical dimensions of the Information Society

- The World Economic Forum's Global Coalition for Digital Safety set [principles](#) to advance digital safety in a rights-respecting way, drive multistakeholder alignment, encourage positive behaviors and actions across the digital ecosystem, and inform and enable regulatory, industry and societal efforts and innovations.
- The World Economic Forum's work on responsible AI supported business and government to adopt AI responsibly, including work on [facial recognition technology](#) currently protecting citizens in 190 countries, and highlighting [over 20 successful AI applications](#) in manufacturing and supply chains. Additionally, the Forum hosted two summits on responsible AI: [Responsible AI Leadership Summit](#) (April 2023) and the AI Governance Summit (November 2023) and launched its [AI Governance Alliance](#) (AIGA).
- The World Economic Forum's Defining and Building the Metaverse initiative collaborated with Accenture and produced its first reports on [consumer applications](#), with different use cases for consumer-facing organizations and on [interoperability](#), providing topical guidance that will empower stakeholders to lead responsibly within the metaverse while mitigating potential socioeconomic harms.
- The World Economic Forum's Earning Digital Trust initiative published an [insight report](#) on the requirements for trustworthy technology, including ethics, privacy, cybersecurity, and other factors into a new framework for decision-makers. The Community comprised representatives from business (Apple, Amazon, Dell, Google,

Mastercard, Microsoft, Salesforce, Walmart, and others) and government (United States Department of Commerce, European Commission, Singapore Cybersecurity Administration and Ministry of Communications and Information) as well as consumer advocates. Project advisors included Accenture, KPMG, and PwC.

- The World Economic Forum's Data for Common Purpose initiative published an [actionable framework](#) focused on improving trust through consent mechanisms, recognizing the need for commercial and technology stakeholders to align on more trustworthy and human-centered business models where trust, consent and active engagement of individuals is foundational.

C11. International and regional cooperation

- The World Economic Forum's Building a Quantum Economy initiative – which aims to [positively shape](#) the opportunities and risks of quantum technology – [provided](#) clear, concise and neutral assessment of the current state of the quantum computing industry, advising business leaders and policy-makers on actions to be taken now to prepare for the technology once it matures.

Part Three (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.

- The World Economic Forum's Earth Observation Insights initiative will address how Earth observation data can be deployed for businesses, climate, and nature with 20 consultations digging into opportunities for collective action and futureproofing to build on in 2023.
- The World Economic Forum's EDISON Alliance will continue working with its partners to make progress on the 1 billion lives challenge by 2025.
- The Forum's GovTech Network will raise the profile and ambitions of Govtech applications, focusing on the divide between innovators and policy makers, as well as the new opportunities generates from emerging and frontier technologies.
- The Forum's C4IR Network will continue to expand into other regions to continue capacity building and global cooperation on technology innovation and governance.
- The Forum's AI Governance Alliance (AIGA) will continue to unite industry leaders, governments, academic institutions, and civil society organizations, to champion responsible global design and release of transparent and inclusive AI systems. The Alliance will support industry transformation, sustainability, and technical responsibility in AI.