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| Report by the Secretary-General |
| REPORT ON PP RESOLUTION 214 (BUCHAREST, 2022) “ARTIFICIAL INTELLIGENCE TECHNOLOGIES AND TELECOMMUNICATIONS/INFORMATION AND COMMUNICATION TECHNOLOGIES” |
| **Purpose**The purpose of this document is to provide a comprehensive report of ITU’s Artificial Intelligence (AI) activities, its rapid growth, and increasing demands from our members and stakeholders.**Action required by the Council**The Council is invited to note the document.**Relevant link(s) with the Strategic Plan**Development of international standards; development of policy frameworks and knowledge products, capacity development, convening platform.**Financial implications**Potential financial implications of sustaining ITU’s growing body of AI work.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**References**[*C24/INF/15*](https://www.itu.int/md/S24-CL-INF-0015/en) |

ITU has been at the leading edge of artificial intelligence (AI) since 2017 with the aim of ensuring that AI accelerates progress towards the United Nations (UN) Sustainable Development Goals (SDGs) and contributes to universal connectivity and sustainable digital transformation.

ITU is executing an ambitious programme on AI, guided by Resolution 214 (Bucharest, 2022) of the Plenipotentiary Conference, and amplified by the new landmark Resolution [A/78/L.49](https://undocs.org/Home/Mobile?FinalSymbol=A%2F78%2FL.49&Language=E&DeviceType=Desktop&LangRequested=False) of the UN General Assembly. These AI resolutions underscore the necessity of developing safe, secure, and trustworthy AI systems that contribute to sustainable development.

The ITU has over 220 AI standards that are either published or in development. This effort is supported by ITU’s broad membership and enhanced through collaborations with ISO and IEC, its partners in the World Standards Cooperation. Additionally, coordination extends to other standards bodies and UN agencies such as the World Health Organization (WHO), the World Intellectual Property Organization (WIPO), the Food and Agriculture Organization (FAO), World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP), and the United Nations Economic Commission for Europe (UNECE).

At the heart of ITU’s efforts is the [AI for Good](https://aiforgood.itu.int/) platform powered by ITU and supported by 40 UN partners, which aims at employing AI to progress the SDGs.

Additionally, ITU co-chairs the UN CEB-HLCP (Chief Executives Board for Coordination – High-Level Committee on Programme) Inter-Agency Working Group on AI with the United Nations Educational, Scientific and Cultural Organization (UNESCO), promoting UN system-wide coordination and policy coherence on AI in its support to Member States and other stakeholders.

The Global Symposium for Regulators (GSR-24) programme features dedicated sessions for regulators about AI and robotics for positive impact.

As demand for AI activities grows significantly, ITU is adjusting its programmes to meet global needs. This report details ITU’s role in harnessing AI’s benefits while minimizing risks, supporting its members, UN partners, and other AI stakeholders in their work to ensure a sustainable future.

**AI standards development**

In its pursuit of universal connectivity and sustainable digital transformation, ITU has developed standards for utilizing AI in orchestrating 5G and future networks, multimedia innovation, assessing and improving the quality of digital services, and improving energy efficiency, to name just a few examples. These efforts are amplified by close collaboration with other standards bodies and UN partners, supporting the development and publication of a comprehensive suite of standards across a variety of domains.

Notable examples include:

* In partnership with WHO, ITU has published [35 specifications and reports on AI in healthcare](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Pages/default.aspx) through the ITU-T Focus Group on Artificial Intelligence for Health (FG-AI4H), addressing technical matters as well as ethics and governance.
* ITU collaboration with FAO has published [standards for AI and IoT in agriculture, enhancing food security and sustainability](https://www.itu.int/en/ITU-T/focusgroups/ai4a/Pages/default.aspx).
* Working with WMO and UNEP, ITU has developed [standards for using AI in the management of disasters stemming from natural hazards](https://www.itu.int/en/ITU-T/focusgroups/ai4ndm/Pages/default.aspx).
* The Focus Group on AI and Autonomous Driving developed a report on [Automated driving safety data protocol - Ethical and legal considerations of continual monitoring](https://www.itu.int/pub/T-FG-AI4AD-2021-02).

ITU-T Study Group 13 (Future networks) is maintaining the AI standardization roadmap including existing standards and standards under development across various standards bodies. It includes an overview of AI-related ITU standards and related texts developed by ITU-T Study Groups. For more info see:

* [Supplement 72 to ITU-T Y.3000-series - Artificial intelligence standardization roadmap (11/22)](https://www.itu.int/rec/T-REC-Y.Sup72-202211-I/en)

ITU-T Study Group 16 is working on new standards to provide a framework for authentication of multimedia content. This project is also be supported by initiatives in collaboration with ISO and IEC on [AI watermarking and multimedia authenticity](https://aiforgood.itu.int/event/detecting-deepfakes-and-generative-ai-standards-for-ai-watermarking-and-multimedia-authenticity/) in the AI for Good Global Summit in Geneva in May 2024.

**Support for AI deployment and capacity development**

ITU is working to equip countries around the world with the knowledge and tools necessary to take advantage of AI, with the aim of ensuring that the benefits of AI are globally accessible and equitable.

Through its pre-standardization and standardization work, ITU has cultivated common understandings on AI policy, regulation, and technology. We have offered AI ethics training in healthcare with WHO, collaborated with FAO on an AI toolkit for agriculture, and organized hackathons and trainings on AI for disaster preparedness with WMO and UNEP.

The future AI Readiness Framework and recently launched [AI for Good Innovate for Impact](https://aiforgood.itu.int/innovate-for-impact/) programme are designed to elevate global AI literacy, share best practices, and foster innovation aligned with the SDGs. [ITU’s Giga project with UNICEF](https://www.itu.int/en/ITU-D/Initiatives/GIGA/Pages/default.aspx) employs AI strategically to expand Internet connectivity to connect schools worldwide.

The ITU’s AI for Good initiatives, including the [Neural Network smart-matching platform](https://aiforgood.itu.int/neural-network/) with 27 000 members from over 180 countries, the AI4G Infinity Framework (a comprehensive and practical power-tool which will help onboard industries, startups, academia and policy makers in the AI value-chain), and the AI Scholar Programme, enhance AI capacity development. AI for Good is piloting projects that use AI to transform AI for Good webinars into academic courses and will provide an “AI standards co-pilot” service to help draft ITU standards, promoting inclusive AI expertise and application.

The [Early Warnings for All Initiative](https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Pages/Early-Warnings-for-All-Initiative.aspx), led by the World Meteorological Organization (WMO), the United Nations Office for Disaster Risk Reduction (UNDRR) and ITU aims to ensure that every person on Earth is protected by early warning systems by 2027. ITU is coordinating the AI subgroup that cuts across several pillars with technical AI partners like Google, Microsoft, Planet, International Committee of the Red Cross, and others.

Additionally, ITU’s Bridging Standardization Gap (BSG) programme, has furthered this effort by offering fellowships to African winners of AI for Good robotics and machine learning challenges to support their participation of the AI for Good Global Summit 2024.

**AI governance, policy, and regulatory assistance**

Upcoming ‘[AI Governance Day](https://aiforgood.itu.int/summit24/programme/#day0) – From Principles to Implementation’, organized as part of the AI for Good Summit, aims to convene government leaders, policy-makers, researchers and technologists to streamline efforts, maximize the use of existing and ongoing work on AI governance frameworks, facilitate the exchange of knowledge on AI policies, regulation, and implementation among all ITU Member States and stakeholders. The day is expected to bring almost 70 Ministers and Heads of Regulatory Authorities and will include stakeholders often excluded from other processes on AI governance like developing countries and civil society.

ITU’s commitment to bridging the AI gap is exemplified by the outcomes of the 2021 World Telecommunication/ICT Policy Forum and the 2024 Global Symposium for Regulators which features an AI and Robotics track curated by AI for Good. In September 2023, ITU launched the [AI Landscape Survey](https://aiforgood.itu.int/ai-landscape-survey/) for Member States to gather information about their AI-related policy and regulatory initiatives and how these efforts align with their ongoing Digital Transformation endeavors. Responses have been received from 69 Member States comprising 12 developed countries and 57 developing countries, including 10 Least Developed Countries. The Survey results reveal a critical gap in AI-specific strategies among Member States but also identified a notable trend towards integrating AI in digital transformation efforts.

**UN system-wide coordination on AI**

The UN CEB-HLCP (Chief Executives Board - High-Level Committee on Programmes) Inter-Agency Working Group on AI, co-chaired by ITU and with UNESCO (IAWG-AI), leads a comprehensive coordination effort across over 40 UN entities, and has developed key initiatives like the UN System-wide Ethical Principles for AI.

HLCP and CEB have endorsed a [White Paper](https://unsceb.org/united-nations-system-white-paper-ai-governance), produced by IAWG-AI, which analyses UN current institutional models and related functions, as well as and existing international normative frameworks in the UN System that could be applied or leveraged for international AI governance.

The White Paper has identified over 50 instruments that could already be applied or extended towards international AI governance efforts.

In addition, leveraging the IAWG-AI members and AI for Good UN partners, ITU coordinates inputs and prepares the annual [UN Activities on AI](https://aiforgood.itu.int/about-ai-for-good/un-ai-actions/) report, an interactive directory. Currently, 396 AI projects from 47 agencies are reported, covering all 17 Sustainable Development Goals (SDGs) with outputs mainly in software tools and reports, focusing on topics like human rights, ethics, and justice; environment; agriculture; health; education; gender; and telecommunications, and involving collaborations with the UN system, member states, academia, and the private sector.

**UN SG High-level Advisory Body on AI**

In October 2023, the UN Secretary-General established a multi-stakeholder High-level Advisory Body on AI to undertake analysis and advance recommendations for the international governance of AI (HLAB-AI). They released an interim report in December 2023. Their final report is due later this year.

ITU has hosted members of the HLAB-AI at its Geneva headquarters in March 2024. HLAB-AI members have been invited to join the AI for Good Summit 2024 and will be attending various sessions. The IAWG-AI White Paper has been submitted to HLAB-AI for their consideration as they prepare their final report and preliminary findings were submitted in December.

**Multistakeholder collaboration via AI for Good**

The AI for Good platform has become a powerful tool for fostering public-private partnerships, facilitating knowledge exchange, and assisting developing countries in achieving sustainable development through the practical application of high potential AI use cases.

Since its inception in 2017, the AI for Good platform has transitioned from an annual summit to an ‘All Year, Always Online’ format, hosting over 150 online events per year, in addition to an annual Summit in Geneva. This expansion has not only enhanced ITU’s visibility within the AI community and attracted new members to ITU but also attracted extensive international media coverage from major outlets like BBC, Wired, and CNN.

Through [ITU’s AI for Good initiatives](https://aiforgood.itu.int/programme-ai-for-good/), such as its [AI start-up](https://aiforgood.itu.int/about-ai-for-good/innovation-factory/) and [robotics competitions](https://aiforgood.itu.int/robotics-for-good-youth-challenge/), [machine learning challenges](https://aiforgood.itu.int/about-ai-for-good/aiml-in-5g-challenge/), and the [ITU Journal](https://www.itu.int/en/journal/j-fet/Pages/default.aspx), we are currently amassing a repository of AI knowledge and applications that impact the SDGs. Moving forward, this foundation will enable us to establish, to contribute to the wealth of knowledge to drive sustainable development aligned with the SDGs.

The upcoming [AI for Good Impact Initiative](https://aiforgood.itu.int/impact-initiative/) will play a crucial role in mobilizing the necessary resources to broaden AI applications globally, ensuring equitable progress across all SDGs and regions.

In partnership with the [Partner2Connect Digital Coalition](https://www.itu.int/itu-d/sites/partner2connect/), ITU invites contributions from diverse sectors for projects and financial commitments, focusing on AI-enhanced access to technology and connectivity and accelerating adoption through skills development and digital inclusion.

**Demand for more activities**

ITU is experiencing a surge in demand for policy and capacity development support, as well as its AI for Good initiative, highlighting the global recognition of its impact.

AI for Good will host its first regional event – AI for Good Impact India – alongside the World Standardization Telecommunication Assembly (WTSA-24) in New Delhi at the request of the Indian government.

There is significant demand for similar regional events to be hosted by members.

ITU’s AI for Good initiative is still primarily funded by industry sponsors. Growing demands for AI support as noted above (capacity building, trainings, and development of educational resources) require additional resourcing. In this regard, the secretariat is inviting Member States to support this work through voluntary contributions.

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