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Contribution by ITU

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the age of AI”**

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Commission on Science and Technology for Development, 2025-2026 Inter-sessional Panel

International Telecommunication Union's Contribution to the priority theme: Science, Technology and Innovation in the age of AI

The International Telecommunication Union (ITU) has been at the leading edge of artificial intelligence (AI) since 2017 with the aim of identifying practical AI applications to solve global challenges and contributing 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 Resolutions [A/RES/78/265](#) and [A/RES/78/311](#) of the UN General Assembly. These AI resolutions underscore the necessity of developing secure and trustworthy AI systems that contribute to inclusive, sustainable development, and enhance international cooperation on capacity building in this regard.

ITU has over 470 AI standards that are either published or in development. This effort is driven by ITU's broad membership and enhanced through collaborations with ISO and IEC, its partners in the World Standards Cooperation (WSC). Additionally, coordination extends to other standards bodies and UN agencies. The adoption of Resolution [101 \(New Delhi, 2024\)](#) further emphasizes ITU's recognized role in establishing trusted AI standards.

At the heart of ITU's efforts is the AI for Good platform led by ITU and supported by over 50 UN partners, which aims at identifying innovative AI applications, building skills and standards, and advancing partnerships to solve global challenges.

Additionally, ITU co-chairs the UN [Inter-Agency Working Group on AI](#) and the AI Subgroup of the Working Group on Digital Technologies (WGDT), as well as the WGDT itself under the Pact for the Future implementation framework, promoting UN system-wide coordination and policy coherence on AI in its support to Member States and other stakeholders, as well as implementation of the Global Digital Compact (GDC).

As demand for AI activities grows significantly, ITU is adapting 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 prosperous future.

AI standards development and exchange

In its pursuit of universal connectivity and sustainable digital transformation, ITU has developed standards for utilizing AI in various relevant scenarios. 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:



- The newly announced [Global Initiative on AI for Food Systems](#) led by ITU, FAO, WFP and IFAD to use AI to boost productivity, efficiency, and global food security.
- Two [landmark resources](#) on standards and policy considerations for multimedia authenticity were released by the [AI and Multimedia Authenticity Standardization Collaboration](#) driven by ITU, ISO, IEC and other key standards communities.
- The [Focus Group on AI-Native Networks](#) is exploring and defining the fundamental changes needed in network architecture to fully harness the potential of AI.
- ITU launched the [Global Initiative on Resilience to Natural Hazards through AI Solutions](#) aiming to provide expert guidance and support for research, innovation, and the development of standards.
- The [Global Initiative on AI for Health](#) has restructured and adopted a roadmap, devoting efforts to promote standardized guidelines, catalyze cross-sector collaboration, and encourage broader participation from the global health and AI communities.
- ITU-T Study Group 2 has started work on a number of Recommendations that use AI for network management.
- ITU-T Study Group 5 published the [Measuring what matters: How to assess AI's environmental impact](#) report and is developing new standards to assess greenhouse gas emissions and improve the energy efficiency of AI systems.
- ITU-T Study Group 11 focuses on the standardization of AI-driven tools that can be applied at the signalling level to support various services within IMT-2020 networks and beyond.
- ITU-T Study Group 13 is maintaining the [AI standardization roadmap](#), including existing standards and standards under development across various standards bodies.
- ITU-T Study Group 20 is advancing the development of international standards for the use of AI in the context of smart cities and communities.

The ITU-R Study Groups include various AI aspects in their studies:

- ITU-R Study Group 1 published the report on [Next generation spectrum monitoring](#), which applies new trends in data sciences, including AI and big data technologies, to the automation of spectrum monitoring.
- ITU-R established the Correspondence Group [Machine learning for propagation studies](#) to provide guidance in the application of machine learning in the development of radio-wave propagation prediction methods.
- ITU-R Study Group 6 is working on the AI for broadcasting, including the use of generative AI in broadcasting programme making workflows and the extraction of audio and video objects during production.

Annual International AI Standards Summits have started with the inaugural meeting on the sidelines of WTSA in New Delhi to answer the call from the global community for comprehensive and impactful AI standards. ITU, ISO and IEC will bring together standards developers and stakeholders at the second [International AI Standards Summit](#) on 2 and 3 December 2025, in Seoul, Korea (Republic of).

The [International AI Standards Exchange](#) took place on 11 July as part of the 2025 AI for Good Global Summit and focused on the future trajectory of AI and how to develop technical



standards to create more opportunities for innovation worldwide. A new [AI Standards Exchange Database](#) was launched, which will help establish the technical foundations for AI innovations to achieve global impact.

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 the AI for Good Impact initiative, which aims to scale impactful AI solutions and strengthen capacity-building efforts —particularly for developing countries, [the AI Skills Coalition](#) has been established as a transformative movement aimed at empowering individuals and communities— with essential AI expertise. By providing access to [high-quality AI training](#), the Coalition seeks to bridge the AI divide and ensure inclusive participation in this technological revolution by supporting capacity and skill development for policymakers, regulators, industry leaders, professionals across the workforce, as well as the next generation of tech innovators. The initiative aims to train 10,000 people from around the world on AI skills in 2025, with emphasis on developing countries. Will.i.am was appointed as the Goodwill Ambassador for the Coalition.

In 2025, ITU expanded this initiative with the launch of the [Young AI Leaders Community](#), inviting young AI experts aged 18 to 30 to join or establish a hub within our six recognized regions. Created to foster a strong and diverse network of global AI leaders, the community has already established over 100 hubs across 50 countries and welcomed more than 650 members. Through this initiative, young people gain the skills, platforms, and support needed to lead the way toward a more inclusive and sustainable digital future by developing impactful AI projects at both local and global levels.

The AI for Good Impact initiative also includes flagship programmes such as the [Global AI Challenges](#), the AI for Good [Innovation Factory and Startup Acceleration Programme](#), and the [Robotics for Good Youth Challenge](#), which engages young innovators worldwide and culminated in a global competition at the AI for Good Global Summit in 2025. These programmes, alongside the [AI for Good Impact Report](#), underscore ITU's commitment to bridging the AI divide, fostering international partnerships, and supporting sustainable development goals through AI capacity building.

The AI for Good Impact Initiative also launched a new series of regional Impact events, including AI for Good Impact India, at the request of the Indian government. [AI for Good Impact Africa](#), the next regional event, will take place on 31 October 2025 in partnership with AI Expo Africa in Johannesburg, South Africa, which is taking place from 29 to 31 October 2025.

The [Global Initiative on Virtual Worlds and AI](#), launched by ITU, Digital Dubai, and UNICC, serves as a global platform that aims at fostering open, interoperable, and innovative AI-powered virtual worlds that can be used safely. Its flagship deliverable, the [Citiverse Use Case Taxonomy Overview](#), presents a comprehensive global taxonomy of real-world applications for AI-powered virtual worlds.

The [United for Smart Sustainable Cities \(U4SSC\)](#) Thematic Group on AI in Cities leads ongoing working groups focused on key areas, including Autonomous Cities and AI-Driven Key



Performance Indicators Measurement, aiming to create frameworks and tools that help cities harness AI responsibly to improve quality of life, sustainability, and governance.

ITU, France, and UNEP co-initiated the [Coalition for Sustainable AI](#) at the French AI Action Summit. ITU's [Open Source Programme Office](#) project is also exploring how open source AI models could enhance digital public services, especially in countries with scarce resources.

The UN [Early Warnings for All Initiative](#) partners lead the [AI Sub-Group of Early Warnings for All](#), with overall coordination led by ITU. The AI sub-group identifies gaps in countries' early warning systems where AI can add value, then matches them with solutions. Work is ongoing to develop a searchable and interactive AI Solutions Catalogue. The AI sub-group launched the [AI for Early Warnings for All Innovation Challenge](#) in 2025 to harness AI in closing critical gaps in early warning systems. A new project proposal was also successfully funded by the Republic of Korea, which will start in January 2026, focusing on 'Advancing Early Warnings through AI: Matchmaking and Pilot Accelerator'.

[ITU's Giga project with UNICEF](#) employs AI strategically to expand Internet connectivity to connect schools worldwide. The [AI skills accelerator for Girls](#) project will provide girls and women with digital, ethical and managerial skills to become content creators and boost creativity and innovation. ITU Regional Office for Asia and the Pacific is organizing the [Southeast Asia AI Webinar Series](#) to continue to share information and build capacity on gender-sensitive and socially inclusive AI standards, policies, frameworks and initiatives.

Over the past year, a number of courses have been offered in the field of AI on the [ITU Academy](#). The ITU training course on 'AI governance in practice: developing secure and innovative frameworks' will be launched in October 2025 in Geneva, as a face-to-face course. It will subsequently be delivered in person in Africa, Asia-Pacific and the Americas, and offered online through the ITU Academy platform.

AI adoption is a key element of the ITU's Transformation agenda. ITU launched the [AI Hub](#), a single point of access for AI tools, e-learning materials, resources and AI Seed Funds open to all ITU staff. ITU also regularly organizes sessions on AI and emerging technologies for ITU staff and the diplomatic community under the Learning Labs initiative and the [Demystifying Digital initiative](#), respectively, to help facilitate the use of such technologies in day-to-day work and a better understanding of emerging trends.

AI governance, policy, and regulatory-related work

The 2025 [AI Governance Dialogue](#) took place on 10 July 2025 as part of the 2025 AI for Good Global Summit. Global dialogues on AI governance driven by AI for Good Global Summits ensure that developing countries are included in discussions that can shape the digital future. At this year's AI Governance Dialogue organized by ITU with over 50 UN partners, ministers and high-level government officials joined stakeholders from around the world to chart pathways for responsible and impactful AI. The dialogue was co-chaired by Majed Al Mesmar, Director-General of the Telecommunications and Digital Government Regulatory Authority of the United Arab Emirates, and Anne Bouverot, France's Special Envoy for Artificial Intelligence. The vision captured by the [co-chairs' summary report](#) calls for AI that bridges innovation, inclusion, and sustainability.

The ITU [AI Landscape Survey](#) for Member States gathered information about their AI-related policy and regulatory initiatives and how these efforts align with their ongoing digital



transformation activities. The survey questions are now incorporated into the ITU Regulatory Survey to be conducted regularly.

ITU's commitment to bridging the AI gap is also exemplified by the outcomes of the 2021 World Telecommunication/ICT Policy Forum and the [2024 Global Symposium for Regulators \(GSR-24\)](#) which featured dedicated sessions for regulators about AI and robotics for positive impact. The [GSR-24 Best Practice Guidelines](#) agreed by ICT regulators include a series of considerations for balancing innovation with regulation to create a positive impact on societies and economies from emerging technologies such as AI. The discussions around AI will continue at GSR-25. The event will also include a strategic foresight masterclass on AI collaborative frameworks.

The topic of transformative technologies and AI is also featured in the digital regulation platform and a guide towards AI collaborative frameworks will be added before the end of the year. The topic of AI skills was also featured prominently at the ITU Digital Skills Forum. The [ITU Digital Skills Toolkit](#) provides step-by-step guidance to policymakers on how to develop national strategies and roadmaps to address the pending AI and digital skills gap.

Additionally, ITU has initiated the drafting process of a Joint Statement on child protection in the context of AI, in a collaborative effort with the Committee on the Rights of the Child.

The World Summit on the Information Society (WSIS) Framework and its Action Lines to advance STI in the age of AI

The WSIS framework, including the WSIS Action Lines have evolved to remain agile and future-proof, adapting continuously as technologies like AI, big data, and cloud computing, reshaping society and governance paradigms. In the dynamic era of AI, STI are being profoundly transformed, accelerating discovery, reshaping infrastructure, and challenging governance norms. The WSIS Action Line C2 (Information and Communication Infrastructure) underlines the foundational importance of reliable, affordable, and inclusive digital infrastructure to ensure that AI-driven solutions reach marginalized and remote communities. Action Line C4 (Capacity Building) emphasizes essential skills development ranging from e-literacy and lifelong learning to teacher training and research capacity to empower stakeholders to harness AI's potential effectively. WSIS Action Line C5 (Building Confidence and Security in the Use of ICTs) becomes critical in the AI era, prioritizing cybersecurity, data protection, privacy, and trustworthy design to bolster public confidence in increasingly automated systems. Meanwhile, Action Line C6 (Enabling Environment) calls for transparent, pro-competitive legal and regulatory frameworks, plus resilient Internet governance structures, that foster innovation while safeguarding rights and economic opportunity. Together with C7 (E-Science) and C10 (Ethics), these Action Lines form an agile WSIS framework that supports not just the technological acceleration afforded by AI, but also ensures equitable infrastructure, inclusive capacity, secure deployment, ethical oversight, and sustainable policy environments critical for meaningful, responsible STI.

The [WSIS Stocktaking](#) platform, maintained by the ITU, includes a wide range of AI-related projects, showcasing practical applications and innovations from around the world. In addition, the annual [WSIS Prizes](#) have been recognizing and celebrating impactful AI initiatives on the ground, highlighting how artificial intelligence is being leveraged to drive sustainable development and tangible results across different sectors.



The WSIS+20 High-Level Event 2025 [outcome documents](#), including the [Chair's Summary](#) by South Africa, reaffirm these priorities:

- *“The WSIS Action Lines offer a pathway to ensure that digital and AI transformations remain anchored in shared values and global development objectives.”*
- *“The High-Level Event highlighted the continued importance of integrating ethical and rights-based approaches into technology design and deployment, especially as AI systems become more pervasive. The WSIS architecture, with its legacy of inclusive and anticipatory governance, provides an essential foundation for addressing such cross-cutting human rights challenges.”*
- *“While recognizing the transformative potential of AI for economic growth, cultural preservation, and language diversity, ministers stressed the importance of skills development, infrastructure investment, and knowledge sharing to ensure that all countries can benefit equitably.”*
- *“Together, through these mechanisms and guided by UNGIS’ coordination, we can realize a shared vision of people-centered, inclusive, and sustainable digital societies that benefit all regions and all people, especially in the face of AI and emerging technologies.”*
- *“There was strong consensus that existing mechanisms, including the WSIS Forum and the IGF, as well as initiatives like the AI for Good Global Summit, are not only relevant but indispensable. Their UN legitimacy, proven multistakeholder methodologies, and global reach make them ideal platforms to implement the GDC and translate its principles into measurable action.”*

Supporting UN system-wide coordination on AI

The UN [Inter-Agency Working Group on AI](#) (IAWG-AI), co-chaired by ITU and UNESCO, leads a comprehensive coordination effort across almost 50 UN entities, and has developed key initiatives like the [UN System-wide Ethical Principles for AI](#) and the [UN System White Paper on AI Governance](#). Two resolutions ([ITU WTSA Resolution 101](#), [UNESCO 220 EX/Decision 41](#)) adopted by Member States of ITU and UNESCO, respectively, recognizing the work of IAWG-AI.

Requested by the High-level Committee on Programmes in October 2024, the IAWG-AI is now aligning its work and offering UN system support to the GDC implementation alongside an updated work plan requesting the integrated development of an AI toolbox and common online platform based on a standardized taxonomy, to further facilitate interagency cooperation in capacity-building activities to support Member States, expected deliverable due in 2025.

The Working Group on Digital Technologies, co-chaired by ITU and ODET, has set up six sub-groups, including one on AI, co-led by ITU, ODET, and UNESCO, and tasked with follow-up to the AI-related provisions of the GDC. The AI subgroup is now convening jointly with the IAWG-AI at regular intervals to help channel UN system inputs to the relevant GDC-mandated processes.

ITU is closely following the intergovernmental process and consultations to identify the terms of reference and modalities for the establishment and functioning of the Independent Scientific Panel on AI and the Global Dialogue on AI Governance. ITU hosted the Co-



Facilitators for a working breakfast discussion on 12 February 2025 to update them on ITU's efforts in AI, a briefing of the Co-Facilitators to Geneva-based Missions, and a Co-Facilitators consultation for Geneva-based UN organizations, as well as briefings to the WG DT Subgroup 5/IAWG-AI joint meetings.

ITU coordinates inputs and prepares the annual UN Activities on AI report. In the [latest version](#) released at the 2025 AI for Good Global Summit, with 53 entities contributing, the report shows how the UN system is integrating AI across its work, with 729 projects in 2024, up from 406 in 2023, covering all 17 SDGs. The report also lists the UN focal points and related contact information for the various projects, thereby serving as the only UN directory of its kind on AI. The report therefore serves a tool to further collaboration and build common understanding around emerging AI technologies and solutions.

Multistakeholder collaboration

With AI innovation growing in speed and scale, the [AI for Good Global Summit](#) reinforced the global commitment to AI governance, skills, and standards. Over 11 000 participants from 169 countries participated in the [2025 AI for Good Global Summit](#) and [World Summit on the Information Society \(WSIS\)+20 High-Level Event 2025](#), with many more taking part online. 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. Next year's [AI for Good Global Summit](#) will take place in Geneva from 7 to 10 July 2026.

Through ITU's [AI for Good initiatives](#), including the [Neural Network smart-matching platform](#) with over 43 000 members from over 180 countries, the AI for Good Infinity Framework, and the AI Scholar Programme, [AI start-up](#) and [robotics competitions](#), machine learning challenges, and the ITU Journal, a repository of AI knowledge and applications is being amassed. The [AI for Good Impact Initiative](#) plays a crucial role in mobilizing the necessary resources to broaden AI applications globally, ensuring equitable progress in solving global challenges across all regions. This foundation is ITU's collective intention to drive meaningful change through the implementation of Resolution [214 \(Bucharest, 2022\)](#) and build a network of supporters to help fund and resource our AI for Good activities globally.

The annual WSIS Forum serves as a multistakeholder platform for the broader ICT for Development community to discuss the challenges and opportunities for emerging technologies such as AI in the context of development. Several dedicated tracks, high-level dialogues and workshops were organized at WSIS+20 High-Level Event 2025—including by ITU and other UN partners—on related thematic topics. Notably, the [WSIS+20 High-Level Event](#) 2025 and the AI for Good Global Summit were held in the same week this year. This scheduling allowed diverse stakeholder communities to leverage the opportunities offered by both platforms, facilitated a comprehensive dialogue on the integration of AI into development strategies, emphasizing the importance of multistakeholder collaboration in harnessing emerging technologies for sustainable development. In partnership with the [Partner2Connect Digital Coalition](#), 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.



ITU continuously addresses AI across multiple pillars, with a special focus on robust technical standards, inclusive capacity development, resilient digital public infrastructure, and global exchanges on policy, regulation and research.

On 18 August 2025, the UN General Assembly adopted a resolution titled *“Terms of Reference and Modalities for the Establishment and Functioning of the Independent International Scientific Panel on Artificial Intelligence and the Global Dialogue on Artificial Intelligence Governance”* ([document A/79/L.118](#)). Within these modalities, the Assembly agreed that the Global Dialogue on Artificial Intelligence Governance will initially take place alongside the International Telecommunication Union’s AI for Good Global Summit in Geneva in 2026, and during the Multi-Stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals in New York in 2027.