AI Standardization Roundtable Report:
The future of AI, regulation and industry development

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The roundtable, "Harmonizing Global Collaborations in the AI Industry: A roundtable on the future of AI standardization, regulation and industry development", organized by the International Telecommunication Union (ITU) at its AI for Good Global Summit on 30 May 2024 provided a platform for dialogue and collaboration among all stakeholders in artificial intelligence (AI).

Participants highlighted the value of ITU's leadership in organizing annual summits to advance global collaboration on AI for social good and supporting standards development and capacity building.

The discussions underscored the necessity of continuous collaboration to navigate the rapid advancements in AI and their wide-ranging implications for various economic sectors and regions of the world. Participants recognized the importance of adaptive and dynamic AI governance to the sustainable and inclusive growth of AI.

Participants included representatives of the leading developers of international standards – ITU, the International Organization for Standardization (ISO), and the International Electrotechnical Commission (IEC) – as well as governments, companies, various research and development entities, and ITU's sister United Nations agencies.

The constructive dialogue facilitated by the roundtable promoted the integration and harmonization of actions taken by government and industry with respect to AI innovation and associated regulations and technical standards.

Participants shared the view that meaningful collaboration will be foundational to AI's contribution to sustainable development. They also highlighted the importance of stimulating interactions between AI users and data owners to cultivate a diverse ecosystem of expertise capable of ensuring trustworthy AI systems.

Emphasis was placed on the potential of Geneva to spearhead the coordination of international AI standards and the supporting collaboration of AI stakeholders.

Key topics addressed

- **Convergence and collaboration**: Discussions revolved around identifying key areas where AI standards, regulations, and industry needs converge. The sessions explored common challenges and opportunities for global cooperation in AI standardization.
- **Ethics and governance**: A significant portion of the discussions highlighted the ethical dimensions of AI, emphasizing the importance of responsible AI deployment and the establishment of ethical guidelines and governance frameworks.
- **Global vs. regional regulations and standards**: The dialogue also touched upon the balance needed between developing international standards and accommodating regional specificities.

Session overview

The Roundtable included 17 speakers from UN Agencies, Standards Development Organizations, Governments, Private Sector entities and International Organizations. It was co-chaired by Bilel Jamoussi, Deputy Director of ITU Standardization Bureaux and Ahmed Riad, Senior Director of Standards and Industry Development at Huawei.

The roundtable was structured as two panel discussions:

1   Panel discussion on AI standards

- The session featured discussions on the significance of standards in helping all regions of the world to capitalize on AI for sustainable development. The need for continuous engagement between AI users and data owners was highlighted as essential for achieving these goals.

2   Panel discussion on the roles of government and the private sector

- The focus shifted to the interplay between government and private-sector efforts in AI governance, emphasizing the necessity for collaborative synergy to foster trustworthy AI systems.

Notable insights from panel discussion on AI standards

Seizo Onoe, Director of the ITU Telecommunication Standardization Bureau, highlighted that ITU has published over 100 standards on AI and that over 120 more were under development at the time of writing. He noted that discussions at the preceding AI Governance Day (29 May 2024) had emphasized that technical standards must provide valuable support to global AI governance and help ensure that the AI revolution leaves no one behind. He added that ITU's

experience in building consensus had made clear that sound governance will demand synergy in the actions taken by government, industry, academia, and civil society.

Ana Paula Nishio de Sousa, Chief of the Division of Digital Transformation and AI Strategies within the Directorate of Technical Cooperation and Sustainable Industrial Development at the United Nations Industrial Development Organization (UNIDO) outlined the key elements, challenges, and opportunities related to AI and global harmonization. She emphasized UNIDO's role in bridging different sectors to advance inclusive and sustainable development. She highlighted the environmental impact and noted that AI's carbon footprint is significant. UNIDO is actively developing a comprehensive measurement system for companies to assess their AI carbon footprint and other environmental impact ("AIM Green"), intending to implement relevant global metrics. She stressed the importance of ethical AI development and the need for international collaboration.

Golestan Sally Radwan, Chief Digital Officer at United Nations Environment Programme (UNEP) discussed UNEP's approach to AI in addressing climate change, biodiversity, and industrial impacts, focusing on opportunities as well as risks introduced by AI. She detailed considerations relevant to environmental monitoring and reporting, analyzing data to gain insights, and supporting decision-making processes. She also highlighted the complex risks associated with AI, such as energy consumption and indirect pollution, emphasizing the need to consider these factors when assessing AI's environmental impact.

ISO Secretary-General, Sergio Mujica, discussed the organization's approach to ensuring diversity and inclusivity in standards development. He highlighted that ISO maintains a transparent, consensus-based standardization process and includes academia and civil society in its development of international standards offering practical AI guidance and essential terminology to bridge AI discussions across various industries.

IEC Secretary-General and Chief Executive Officer, Philippe Metzger, highlighted the broad impact of AI across all sectors and the organization's commitment to developing AI standards that enable broad responsible adoption. The 800 experts in the joint IEC and ISO technical committee develop foundational standards, while IEC and ISO technical committees work on sector-specific applications. IEC and ISO are currently engaged in over 40 AI projects. IEC focuses on leveraging its technical expertise to integrate ethical, safety and sustainability considerations into AI development.

The Secretary-General of the World Internet Conference (WIC), Ren Xianliang, detailed the conference's role in AI governance since its inception in 2014 and its official establishment in 2022. With participation from over 100 countries, WIC emphasizes inclusivity and benefit-sharing. In 2023, WIC established an AI working group to enhance cooperation on AI standards. The conference has launched the "AI for Social Good" action plan, underscoring its commitment to improving global well-being through AI and seeking collaborative efforts with various international organizations, academia, and the private sector.

Karen McCabe Senior Director, Public Affairs and Marketing, at the Institute of Electrical and Electronics Engineers (IEEE), discussed how the organization had developed around 150 AI standards at the time of writing, including standards addressing ethical dimensions of AI systems. She noted the rapid pace of technological innovation, which often outpaces standardization efforts, and stressed the importance of standards continuously evolving to balance ethical considerations with technological advancements.

Notable insights from panel discussion on the roles of government and the private sector

Ambassador Thomas Schneider (Switzerland) highlightedthe abundance of guidelines and rules available and the importance of sharing knowledge among countries. He advocated for depoliticizing technical discussions. The Council of Europe is actively collaborating with academia and the Organization for Economic Cooperation and Development to operationalize the rule of law and human rights within AI frameworks. He acknowledged existing gaps and urged harmonization wherever possible by existing mechanism including the World Standards Cooperation (IEC, ISO, ITU).

Ambassador Steve Lang (United States) outlined U.S. government actions including the issuance of an executive order on trustworthy AI, the AI Bill of Rights, and fostering a culture of voluntary commitment among U.S. enterprises. He highlighted the role of the U.S. A.I. Safety Institute, which champions a consensus-based approach inclusive of both the private and public sectors with the aims of ensuring safe and responsible AI deployment. He also mentioned the Public-Private Partnership on AI Safety, driven by scientific underpinnings to ensure AI safety through international collaborations and forums.

Yu Xiaohui, President of the China Academy of Information and Communications Technology (CAICT) discussed the development of AI standards and governance frameworks in China, emphasizing the country's contribution to related international collaboration He stressed the importance of respecting cultural diversity in AI rule-making and advocated for accelerating the implementation of AI standards globally. He highlighted that the upcoming World Artificial Intelligence Conference 2024 in Shanghai, hosted by China's Ministry of Industry and Information Technology, would also focus on AI for social good.

Niraj Verma, Additional Secretary of the Department of Telecommunications (India) highlighted India's commitment to bridging the development gap in AI and engaging in the supporting standardization work of bodies such as ITU, ISO, and IEC. He discussed India's focus on addressing social challenges through inclusive, ethical AI development, including with initiatives like the country's fairness assessment project which aims to mitigate bias and ensure trustworthy AI systems.

Mercedes Aramendia Falco, Director of ICT regulator URSEC (Uruguay) detailed efforts to position Uruguay as a leader in AI research and standards in Latin America. These efforts include the implementation of the UNESCO Recommendation on the Ethics of Artificial Intelligence, the establishment of institutional frameworks, and the development of AI labs. Emphasis was placed on the importance of capacity building and fostering an AI ecosystem that respects human rights and promotes innovation.

Participants from the private sector, including representatives from companies like Turkcell, Cisco, and Huawei, explored the dynamic interplay between AI innovation, safety, and regulation and shared their views on the environment required to foster innovation without compromising safety and reliability. They advocated for an open international standards system that does not stifle technological advancement.

Ali Taha Koç, CEO of Turkcell, emphasized the need for standards that are flexible enough to foster innovation without being overly restrictive.

Diane Mievis, Director of EU Public Policy at Cisco, outlined Cisco's development of cloud and security solutions that integrate AI. She stressed the need for global AI governance to help ensure that AI systems are safe, secure, and reliable. She highlighted that Cisco advocates for open international AI standards, including on topics such as data management, information technology security, and sustainability. She called for enhanced stakeholder engagement in the development of such standards.

Catharina Maracke, Head of Standardization Policy at Nokia, urged AI stakeholders to maintain the international perspective required for AI governance frameworks to be sustainable over the long term.

Karim Rabie, Principal Architect at Red Hat, a provider of enterprise open-source solutions, emphasized the importance of the alignment with OpenSource Community groups and the private sector to accelerate the adoption of the published standards, and stressed the need for clearly defined AI terminology to ensure common understanding among AI stakeholders.

Evan Xiao, Vice President at Huawei Technologies, addressed the importance of the AI ecosystem. He discussed the need to develop technical solutions and strategies working together within the ecosystem. He noted the significance of international collaboration for standardization and interoperability to avoid technological fragmentation and ensure smooth adoption, a key challenge for vendors. He highlighted the opportunity build AI standards together, across regions and countries that bring value to all.

Full List of Speakers

1   ITU [Siezo Onoe and Bilel Jamoussi]
2   ISO [Serjio Mujica]
3   IEC [Philippe Metzger]
4   WIC [Ren Xianliang]
5   IEEE [Karen McCabe]
6   Huawei Technologies Co., Ltd. [Xiao Ran and Chang Xin]
7   Nokia [Catherina Maracke]
8   Cisco [Nicole Isaac]
9   Turkcell [Ali Taha Koç]
10   RedHat [Karim Rabie]
11   CAICT [Yu Xiaohui]
12   Switzerland/Europe [Thomas Schnieder]
13   US Department of State [Steve Lang]
14   India DoT [Niraj Verma]
15   Uruguay [Dr Mercedes Armednia Falco]
16   UNEP [Golestan Sally Radwan]
17   UNIDO [Ana Paula Nishio de Sousa]