



ITU & AI





| Artificial intelligence - Areas of action



Technical standards



Capacity development



Policy & regulatory assistance



UN system-wide coordination



Multi-stakeholder dialogue platform



Technical Standards

- **Develop** international technical standards for digital technologies
- **Bridge the standardization gap** between developed and developing countries
- **Foster cooperation** among national, regional and international standards bodies





ITU standards community



Study Groups

Membership-driven
Study Groups develop
international standards.



Focus Groups

Open to all interested
parties, Focus Groups
define new directions in
ITU standardization.



Workshops and symposia

Open-to-all events analyze
emerging trends and
encourage peer-learning





| Examples of AI-leading ITU industry members



SoftBank





ITU standardization: Technical foundations



Transport, access and home networks



Multimedia



Service quality



Numbering & emergency comms



Artificial intelligence



Cybersecurity



Internet of Things



Environmental efficiency

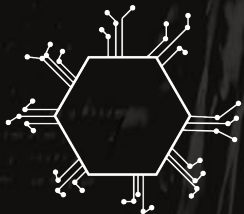


Quantum information tech



Accessibility





Of the **over 4,000 published standards** in force, around **100 are AI-related**



Each year, our standardization work is driven by around **5,000 experts.**



Our Bridging the Standardization Gap programme assists developing countries in maximizing the value of their participation in our work.



Our Network of Women champions women role models in standardization, supported by a training programme on standardization skills.





ITU AI standards

+220

AI standards published or under development



Quality assessment



Energy efficiency



Multimedia



Network orchestration and management



Security



Protocols & test specs



Cable networks



Network operations & maintenance



Including standard frameworks to **integrate AI/ML in networks**, standard **terms and definitions**, standards to **evaluate AI/ML** models and their results, standards for **data handling**



Partnerships laying groundwork for new standards on **AI for health** (ITU, WHO, WIPO), **natural disaster management** (ITU, WMO, UNEP), and **digital agriculture** (ITU and FAO)


| AI-RELATED FOCUS GROUPS & INITIATIVES



AI:+ **AI for Health**
 **World Health Organization**  **WIPO**
INTELLECTUAL PROPERTY ORGANIZATION

AI:  **AI and Internet of Things
for Digital Agriculture**
ITU Focus Group 


AI:  **AI for Natural
Disaster Management**
ITU Focus Group  **WORLD
METEOROLOGICAL
ORGANIZATION** +  **UN
environment
programme**

AI:  **Machine Learning
and 5G**
ITU Focus Group

AI:  **AI for Environmental
Efficiency**
ITU Focus Group

AI:  **AI and Data Commons**
Global Initiative

AI:  **AI for Road Safety**
Global Initiative =

AI:  **AI for Autonomous
and Assisted Driving**
ITU Focus Group +

UN Special
Envoy for
Road Safety +

UN Envoy
on
Technology 



ITU standards authenticate voice calls to combat AI-generated voice

ITU workshop on improving the security of signalling protocols

29 November 2021
13:00 - 17:00 CET

Join us online!
<http://itu.int/go/WS-SSP>



Biden calls for ban of AI voice impersonations in State of the Union address

Spam Calls per User per Month in 2020

58% of all spam calls were determined to be fraudulent while 42% were nuisance

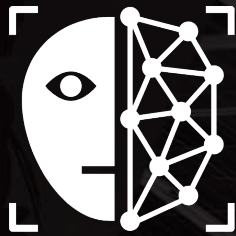


*Data compiled from Hiya's Voice Performance Platform, which processes 13 billions calls per month.



| Deepfake detection

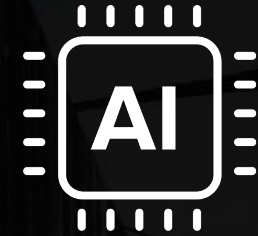
How can the watermark detector(s) be trusted?



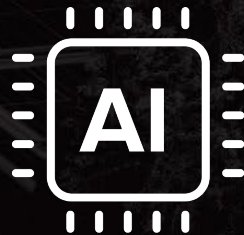
US government has mandated tech companies to find ways to identify AI-generated content.



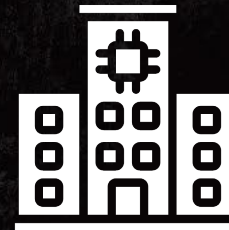
The EU is also looking at enshrining watermarking requirements in law (AI Act Dec 2023).



China has mandated that AI-generated content be clearly labelled.



AI watermarking and multimedia authenticity initiatives need standards and governance



Different tech companies have their own solutions with no interoperability

Launching AI Watermarking and Multimedia Authenticity Standards Collaboration

31 May 2024

Chat AI



ITUEvents



AI for Good

*Accelerating the United Nations
Sustainable Development Goals*

aiforgood.itu.int



40 UN PARTNERS





**THE leading action-oriented,
global & inclusive United Nations
platform on AI**

ALL YEAR, ALWAYS ONLINE



Organizer



40 UN Orgs



Co-convener





AI for Good | 40+ UN Organizations





AI for Good | Multi-stakeholder **Interdisciplinary** Inter-generational





AI for Good | AI for Good programming and reach

5

AI for Good
Global Summits

650+

AI for Good
Online events

50+

ML challenges
& AI Start-up
competitions

26K+

Neural Network
profiles

100K+

Online
community

180+

Countries

1.5K+

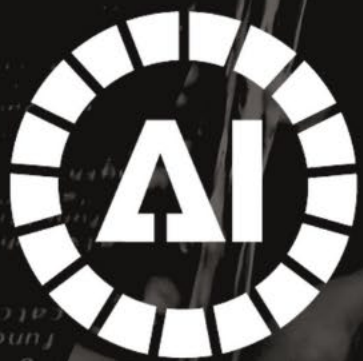
UN staff on
Neural Network

540+

UN staff at
AI for Good Global
Summits



ITUEvents



AI for Good

Global Summit

*Accelerating the United Nations
Sustainable Development Goals*

30-31 May 2024
Geneva, Switzerland

aiforgood.itu.int/





AI for Good Global Summit

Summit week snapshot



MONDAY



TUESDAY



WEDNESDAY



THURSDAY



FRIDAY



Day Zero
AI Governance Day



AI for Good
Global Summit



AI for Good
Global Summit



WSIS



WSIS



WSIS



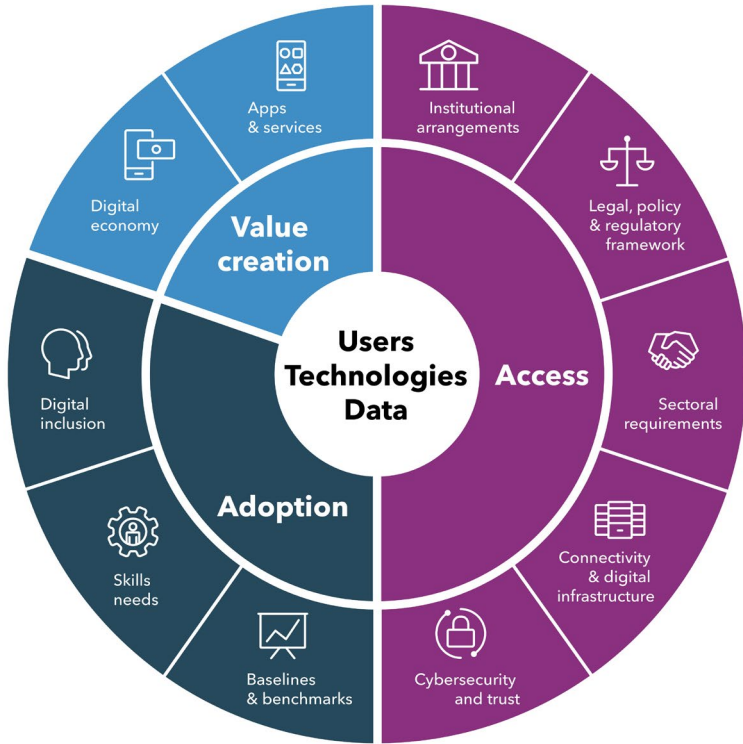
WSIS



WSIS



| Capacity Development



Digital Transformation Wheel



AI for Good
Impact Initiative



ITU Academy
Empowering minds



Accelerating the **digital** transformation of government services



Bridging the Standardization Gap

ITUEvents

ITU AI/ML in 5G Challenge
Applying machine learning in communication networks
ai5gchallenge@itu.int

Gold Sponsor:

Bronze sponsors:

Organized by:



| Policy and Regulatory

ITUGSR

KAMPALA2024

#ITUGSR



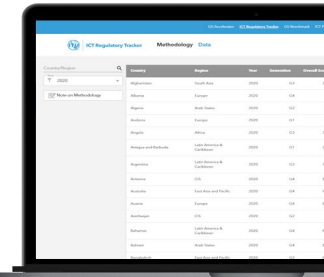
ITUWTPF



G5 Accelerator

Digital Regulation Network (DRN)

A collaborative network of networks



ICT Regulatory Tracker

Evidence-based tool for decision-makers and regulators in the journey from G1 through G4



AI Landscape Survey

AI-related policy and regulatory initiatives



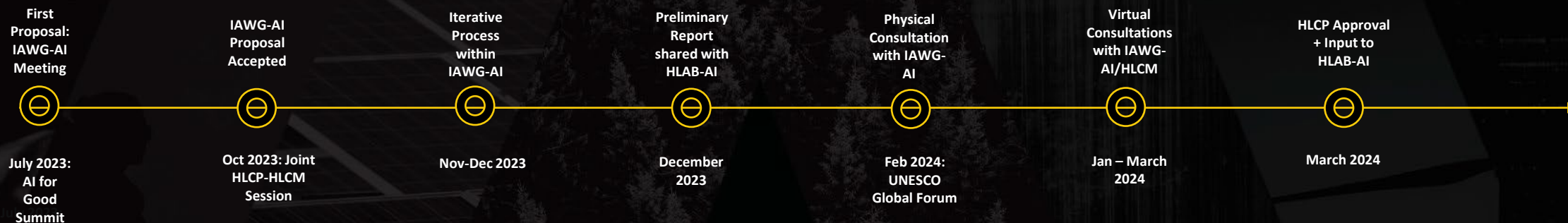


CEB HLCP Interagency Working Group on AI (IAWG-AI)

- Established in 2020
- Co-led by ITU (DSG Lamanauskas) and UNESCO (ADG Ramos)
- 40+ entities
- 10+ workstreams
- Examples of collaborative efforts
 - Input to the UNESCO process on the AI Ethics Recommendations
 - Principles for Ethical Use of AI in the UN System
 - AI/SME Toolkit
 - AI Readiness Tools



UN System White Paper on AI Governance



57 UN System entities participated, **44** surveyed, **10** deep dive interviews, **Multiple** Consultations





UN System White Paper on AI Governance

Three Focus Areas:

1. Existing normative and policy instruments in the UN system to inform and shape AI governance
2. Institutional functions that inform global AI governance
3. Existing governance structures, inclusive normative processes and agile & anticipatory approaches

Focus Area 2

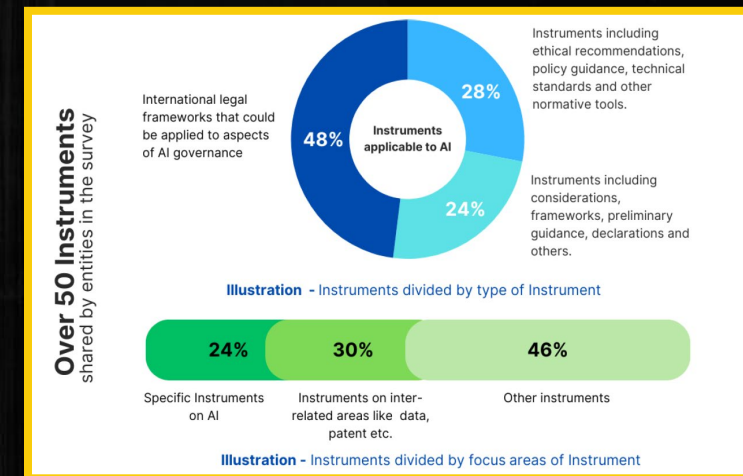
Scientific consensus through technical and authoritative assessments and research

Consensus-building and norm-setting around risks and opportunities

Regulatory coordination, monitoring, and enforcement

Addressing the developmental needs of AI, including capacity building

Focus Area 1



Focus Area 3

- Inclusivity in norm-making processes
- Private Sector Engagement
- Capacity development and detailed technical guidance
- Flexible and dynamic decision-making
- Agile and reflexive governance
- Anticipatory governance and foresight-based research



| Recommendations of the White Paper

Recommendations for the HLAB-AI

1. It's important to leverage the UN System's convening power, normative and policy instruments, institutional functions and frameworks, stakeholder networks and resources - especially keeping in mind the growing AI divide and the interests of the bottom billion.
2. AI governance efforts in the UN System are anchored in international law, including the UN Charter, International Human Rights Law, and other agreed international commitments such as the 2030 Agenda for Sustainable Development.
3. To adequately cater to the specific requirements and economic, social, and environmental priorities of different sectors, UN instruments and frameworks providing sector-specific guidance are key.
4. The important functions to deliver on global AI governance have been tested by entities surveyed, and this experience can deliver tailored approaches on the basis of the specific networks of focus areas and diverse stakeholder groups within the UN System,
5. The fast pace of technology development, compared to the relatively slow processes to develop new international law instruments of institutional structures, and the need for regional or industry/sector-specific approaches are important considerations.

Recommendations to enhance UN System AI governance efforts

1. Present the UN System's tools and instruments in AI governance as a combined toolbox to better inform Member States and stakeholders on the tools available:
2. Expand taxonomies that can facilitate technical and normative guidance for existing instruments
3. Leverage, enhance, and scale observatories on AI
4. Leverage existing networks for building consensus and serve as a platform for communicating key technological milestones and developments in AI
5. Invest in and develop in-house granular and comprehensive AI expertise to support Member States effectively, engage with stakeholder groups, and build trust
6. Enable sandboxes to facilitate the development of internationally harmonized approaches for AI risk assessments and monitoring efforts
7. Proactively manage risks and mainstream foresight capabilities
8. Invest in talent, data, and compute resources, as well as regulatory and procurement capacity