# ITU AI Activities Council Briefing

Information Session

6 June 09:00 - 9:30





# Artificial intelligence - Areas of action



**Technical standards** 



**Capacity development** 



**Policy & regulatory assistance** 



**UN system-wide coordination** 



Multi-stakeholder dialogue platform



# CEB HLCP Interagency Working Group on Al (IAWG-Al)

- 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
  - Al Readiness Tools
  - Inventory of UN AI Initiatives
  - White Paper on Al Governance



## **UN System White Paper on Al Governance**

#### **Three Focus Areas:**

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

**United Nations System** 

02/05/2024

Advance unedited version



CEB Chief Executives Board for Coordination

High-Level Committee on Programmes (HLCP)

Inter-Agency Working Group on Artificial Intelligence (IAWG-AI)

United Nations System White Paper on Al Governance: An analysis of the UN system's institutional models, functions, and existing international normative frameworks applicable to Al governance



# Al for Good Al HLAB Engagement and update

- UN High-Level Advisory Body on AI (HLAB): Established October 2023, co-chaired by Carme Artigas and James Manyika, with 32 global experts.
- Purpose of HLAB: To analyze and recommend strategies for the international governance of AI, ensuring alignment with human rights and Sustainable Development Goals (SDGs).
- December 2023 Launch: Interim Report titled "Governing AI for Humanity" released, advocating for stronger international AI governance aligned with international norms.
- **Upcoming**: Final report to be published before the Summit of the Future, summer 2024.
- ITU Engagement: Hosted HLAB members in Geneva, March 2024; HLAB members to attend AI for Good Summit 2024 + 2 standards deep-dives with ISO & IEC
- IAWG-AI White Paper: Submitted to HLAB for consideration in preparing the final report.





## **Policy and Regulatory**



#ITUGSR







**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

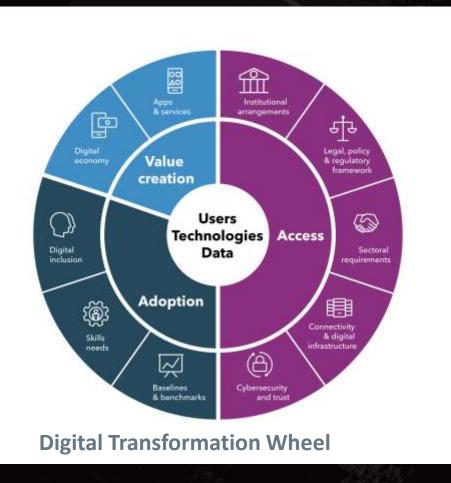


## Al Landscape Survey

Al-related policy and regulatory initiatives



## | Capacity Development







Accelerating the digital transformation of government services









- **✓ ITU** international numbering resources
  - o Identify 8.9 billion people
  - Identify 3.5 billion machines (Internet of Things)
- ✓ ITU-standard digital certificates for authentication are a cornerstone of trusted exchanges online



An estimated **95% of international traffic** runs
over submarine networks

built to ITU standards

Optical networks have grown in capacity by an average of 40% a year for the past 40 years. Such rapid growth, at viable costs, was enabled by ITU standards.





Video accounts for over 80% of Internet traffic, enabled by Primetime Emmy-winning video-compression algorithms standardized jointly by ITU, ISO and IEC.



#### **Examples of AI-leading ITU industry members**







































## ITU AI Consensus-based Voluntary standards

+220

IA 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), Human rights and standards OHCHR

# Al-related Focus Groups & Initiatives

Al for Autonomous and Assisted Driving ITU Focus Group

Al for Road Safety
Global Initiave

Al and Internet of Things for Digital Agriculture

Food and Agricultu Organization of the United Nations

Al for Environmental Efficiency

UN Special Envoy for Road Safety



Al for Health
ITU-WHO Focus Group







ITU Focus Group











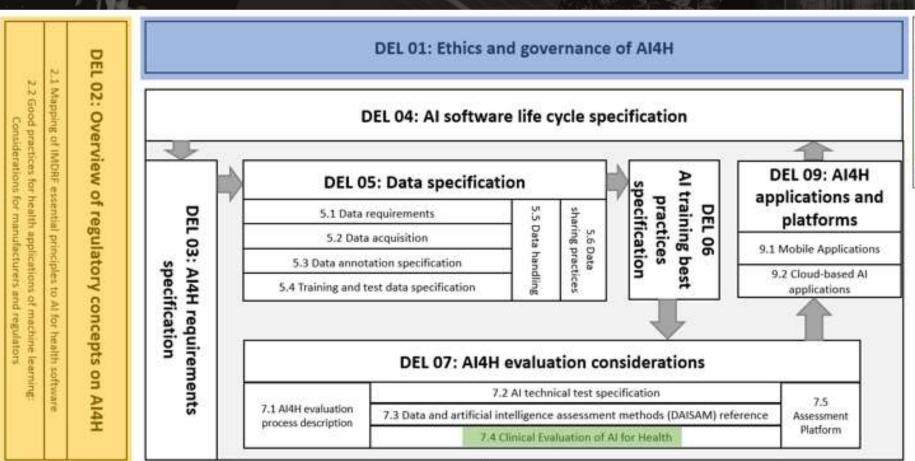


Launch of Global Initiative on Al for Health @ Al4G Summit 2023



# Published: 35 Specifications and Reports Open Code Initiative (OCI): implementing benchmarking and auditing











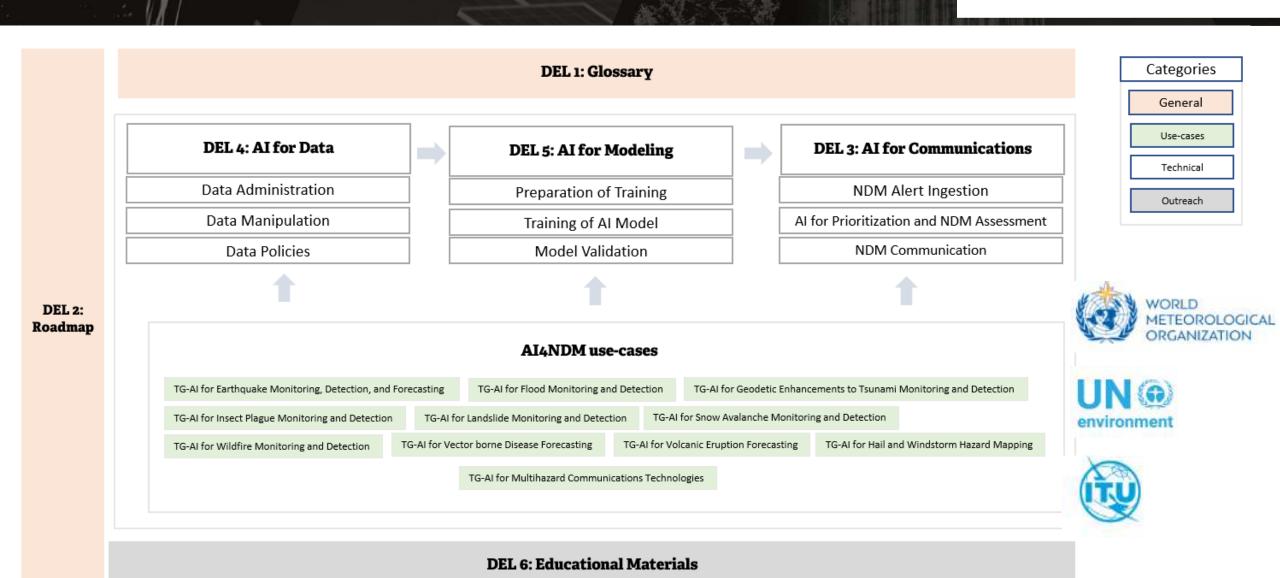


#### DEL 10: AI4H use cases: Topic description documents

TG-Cardio TG-FakeMed TG-Outbreaks TG-Fertility TG-Derma TG-Diabetes TG-Psy TG-Bacteria TG-TB TG-Radiology TG-Falls TG-Snake ....
TG-Histo TG-Symptom TG-Malaria TG-MSK TG-MCH TG-Neuro TG-POC TG-TM TG-Ophthalmo TG-DiagnosticCT TG-Dental TG-Endoscopy

# FG-AI4NDM specifications & reports





# FG-Al4A specifications & reports



#### DEL 2: Ethical, Legal, and regulatory considerations of AI4A

#### DEL 4: Digital Agriculture Use Cases and Solutions

TG-Data Science for surface and underground water monitoring

TG-Georeferenced Data Management

TG-Weather modelling and forecasting

TG- Yield monitoring and Prediction

TG-Irrigation strategy and smart water management

TG-Pest Detection

#### DEL 5: Data Acquisition and Modelling for digital agriculture

Technical system architecture for digital agriculture

Al service container architecture

Data model and data entities

Categories

General

Use-cases

Technical

Ethics

DEL 1: Glossary



FAO

Food and Agriculture Organization of the United Nations











#### Deepfake detection

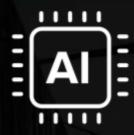
#### How can the watermark detector(s) be trusted?



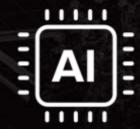
**US government has mandated tech companies** to find ways to identify Algenerated content.



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



China has mandated that Algenerated content be clearly labelled.



Al watermarking and multimedia authenticity initiatives need standards and governance



Different tech companies have their own solutions with no interoperability





# standards authenticate voice calls to combat Algenerated voice

ITU workshop on improving the security of signalling protocols

29 November 2021 13:00 - 17:00 CET

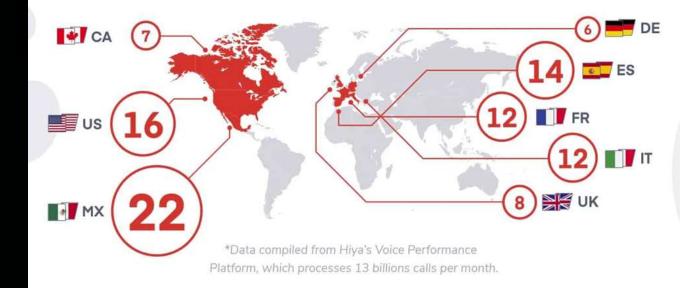
Join us online! http://itu.int/go/WS-SSP



# Biden calls for ban of Al 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



STATE OF THE CALL | 2021 hiya.com/state-of-the-call









# Focus Group on Al for Natural Disaster Management (FG-Al4NDM)

Call to build on the work of the Focus Group



Research



Standards development



Innovation



Natural hazards



Digital technologies (AI)





UN agencies that requested to join as partners

in the successor project, a Global Initiative entitled "Resilience to Natural Hazards through Al Solutions" (or "Resolutions").



### **ITU** Events



Accelerating the United Nations Sustainable Development Goals

ALL YEAR ALWAYS **ON**LINE

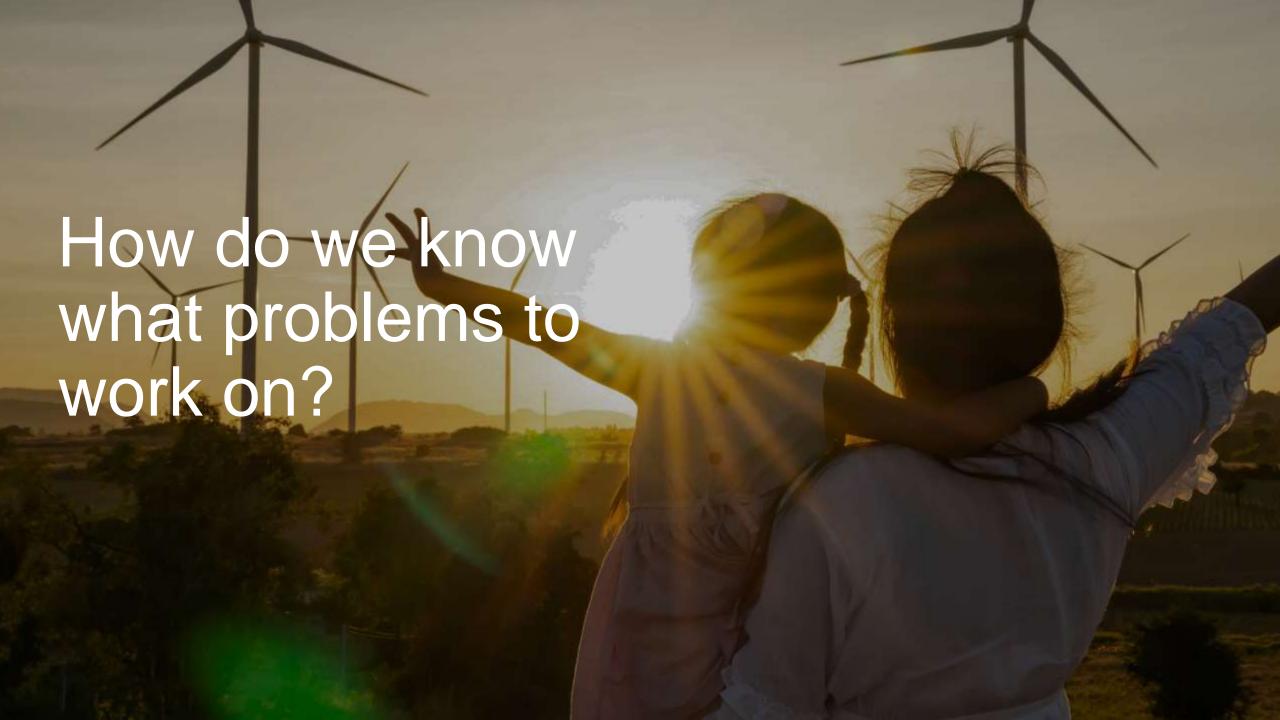
aiforgood.itu.int







Al can help solve humanity's greatest challenges

















































































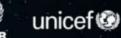


















# 47 UN organizations



# ALEAI for Good Active UN Involvement at Al for Good

UN partners

**50**+

online events with UN partners

17

**UN speakers online** 

1700 + 545

UN profiles on Neural Network

UN attendees at Al for Good Summits

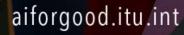
**52+** 

UN speakers at Al for Good Summits

5

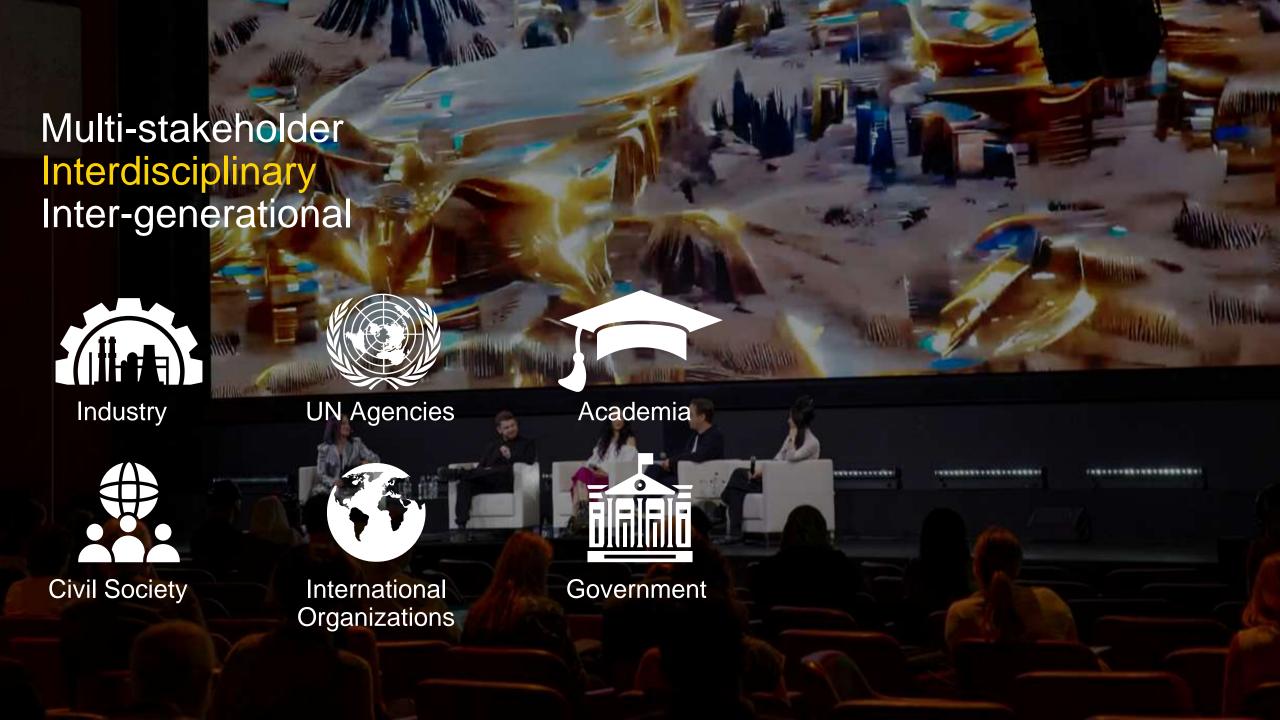
Pre-standarization Initiatives with UN partners

> (WMO,WIPO,WHO,FAO, UNEP, UNECE)













# Connect

#MoreThanASummit

# Al for Good | Al for Good Programming and Reach



**Global Summits** 

650+ 50+

**Online events** 

Competitions and challenges 26K+

**Neural Network** Members

**Countries** 

183 1,100+ 100K+ 1M+

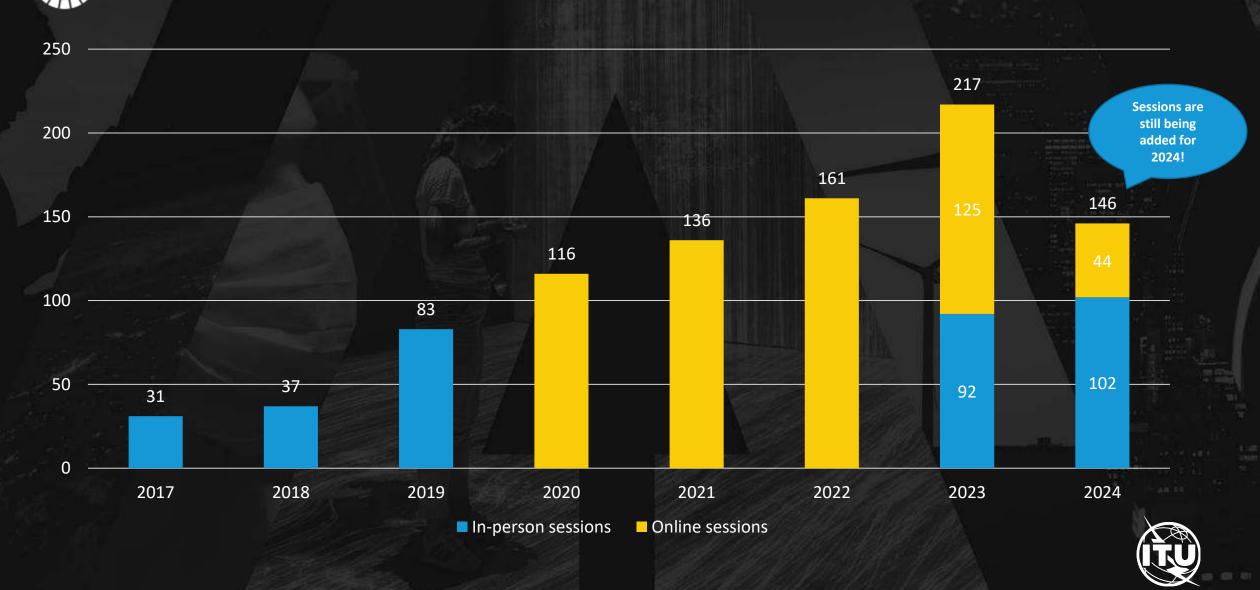
**Hours of content** 

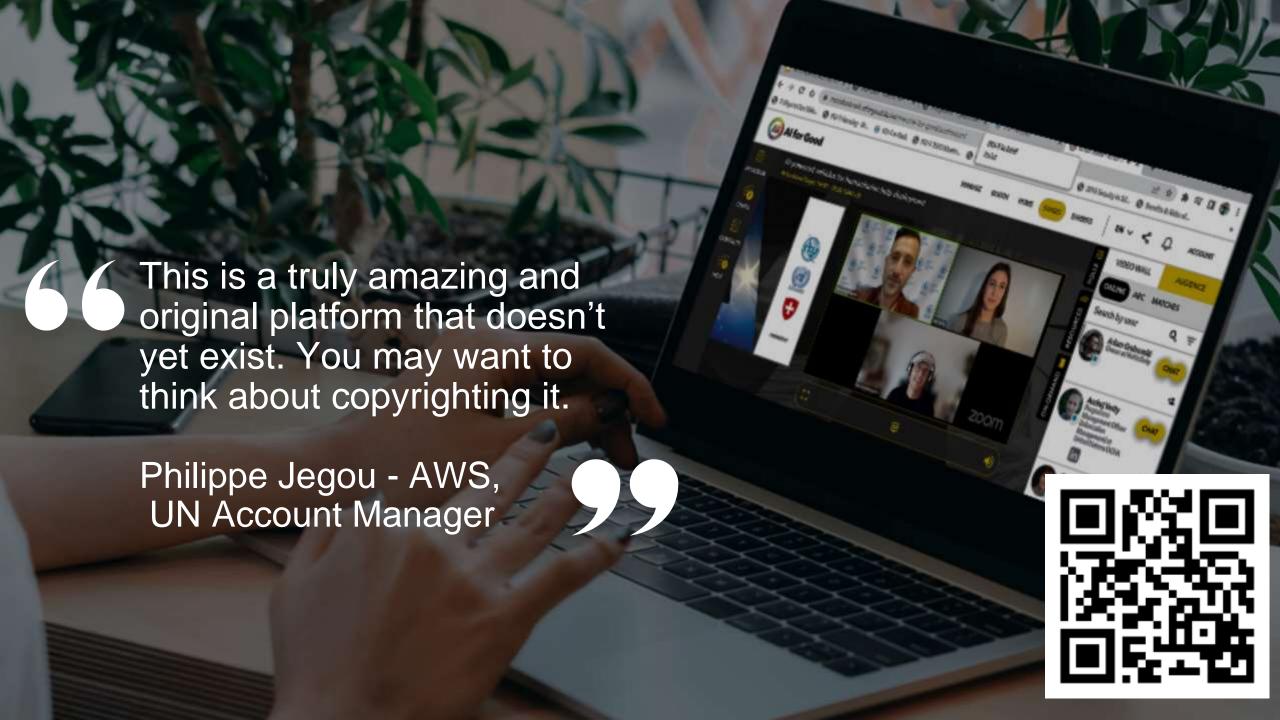
**Online community** 

Session views on YouTube

aiforgood.itu.int

# Al for Good Session growth over time









# Innovation Factory



45

Pitching competitions since 2021



50

Selected finalists for final rounds



10 Winners



+1'000

Start ups



# Al for Good ROBOTICS FOR GOOD

## **Programming**



50+ online sessions



**200+** speakers



50,000+ cumulative session views



40,000+ subscribers

# **Innovation Factory**



online pitching competitions

# **Robotics for Good Youth Challenge**

Inspiring the next generation of robotics innovators



15+ national organizers











Accelerating the United Nations Sustainable Development Goals

30-31 May 2024 Geneva, Switzerland



