UN Digital Transformation Group for Europe and Central Asia

UN Digital Transformation Group for Europe and Central Asia (UNDTG4ECA) Webinar Series for UNCTs

Session on AI for Good

02 September 2025

Agenda

- Opening remarks - *Jaroslaw Ponder,* Head, ITU Office for Europe
- UN Cooperation - *Jaroslaw Ponder,* Head, ITU Office for Europe & *Jin Cui*, Emerging Trends Analyst, ITU
- UN system offering
  - ITU - *Jaroslaw Ponder,* Head, ITU Office for Europe & *Jin Cui*, Emerging Trends Analyst, ITU
  - FAO - *Daniela Di Gianantonio*, Head of Digital Agriculture, FAO Europe and Central Asia
  - UNDP - *Irena Cerovic,* Team Leader, Innovation, UNDP Eurasia
  - UNESCO - *Megumi Watanabe,* Programme Specialist, UNESCO
  - UNICEF - *Saurabh Agarwal,* Digital Innovations Lead, UNICEF Europe and Central Asia
  - WHO - *Ryan Alistair Dos Santos,* Technical Officer - Digital Health, WHO Regional Office for Europe
  - WMO - *Matthieu Kohl*, Associate Programme Officer, WMO Regional Office for Europe
- Questions and discussion
- Closing remarks - *Jaroslaw Ponder,* Head, ITU Office for Europe

Accelerating UN SDGs

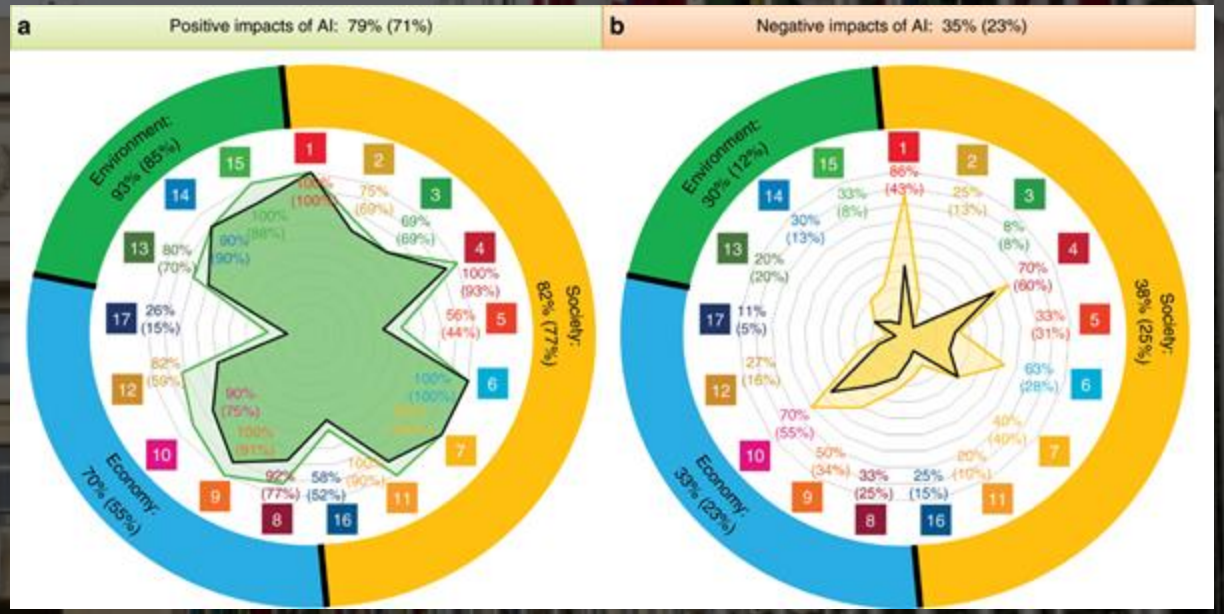
Less than 10 years to achieve the United Nations Sustainable Development Goals.

AI holds great promise.

Mapping AI to SDGs

AI can help to positively impact 134 targets across all the goals.

AI can also inhibit 59 targets.



High-level Committee on Programmes (HLCP) and Artificial Intelligence: United Nations (UN) and Inter-Agency Working Group on AI

- Accelerated development and use of emerging technologies, especially **Artificial Intelligence (AI)**
- 2017 - CEB and HLCP start examining AI in the context of UN
- ITU-led HLCP **UN system-wide Strategic Approach** and Road map for Supporting Capacity Development on AI – (CEB approval. May 2019)
- UNESCO's **Recommendation on the ethics of AI** (Member states approved 2021)
- HLCP40 set up the **Inter-Agency Working Group on AI (IAWG-AI) - co-chaired by ITU and UNESCO**

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

Mission and objective

Co-led by ITU and UNESCO

More than 50 UN agencies and bodies

Report to High-level Committee on Programmes/CEB

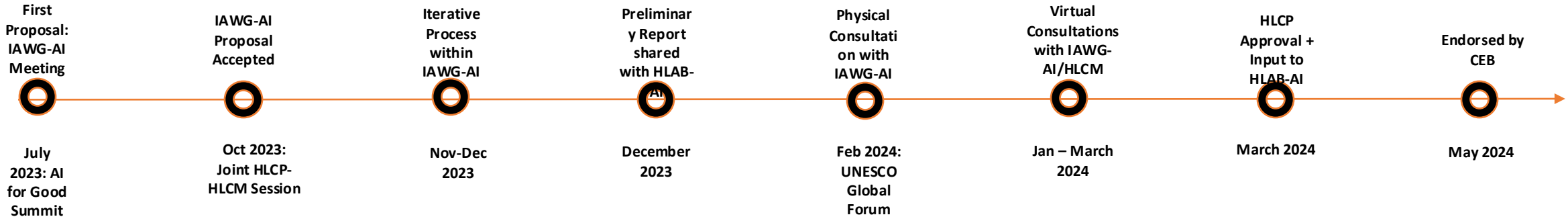
- **Focuses on delivering concrete outcomes on AI aimed at enhancing UN system-wide policy coherence and pragmatic coordination**
- **Combines the ethical and technological pillars of the UN to provide a solid foundation for current and future UN system wide efforts on AI**
- **Aims to ensure its approach towards AI is human rights-based, trustworthy, safe, and sustainable, thereby contributing to achieving the Sustainable Development Goals (SDGs)**

Some IAWG-AI Workstreams

Strategic Foresight on AI	AI Research and Analysis	AI Readiness Framework
AI Ethics Impact Assessment	AI Ethics Policy Guidance for the UN System	AI Guidelines and Toolkit for SMEs
AI Procurement and Deployment Guidelines	AI and Justice	AI and Education

- Thriving community of AI/Emerging Tech Practitioners!
- Concrete workstreams!
- Inclusive Nature - Collaborative spirit!
- Significant interest!
- Recognized by MS-driven Resolutions!

UN System White Paper on AI Governance



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

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**

UN AI Toolbox

Requested by HLCP, the IAWG-AI is now leading 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.

Main idea

- Organize AI resources mapped to UN mandates.
- Standardize taxonomy for AI resources and terms.
- Build a pool of AI experts from academia and industry.
- Create a centralized online platform for AI tools.
- Add Gen AI-powered user-friendly features.
- Leverage insights from observatories like UNESCO and ILO.
- Incorporate findings from key UN publications.

Target Audience

- UN system high-level decision-makers (RC, RR, Heads of Agency) and Staff (internal capacity)
- Civil servants in government agencies, ministries, local administration
- Civil Society Organizations
- Private Sector
- Academia

SUMMIT OF THE FUTURE

Shaping #OurCommonFuture

22-23 September 2024

United Nations, New York

Summit of the Future
Our Common Agenda

United Nations

SUMMIT OF THE FUTURE
OUTCOME DOCUMENTS

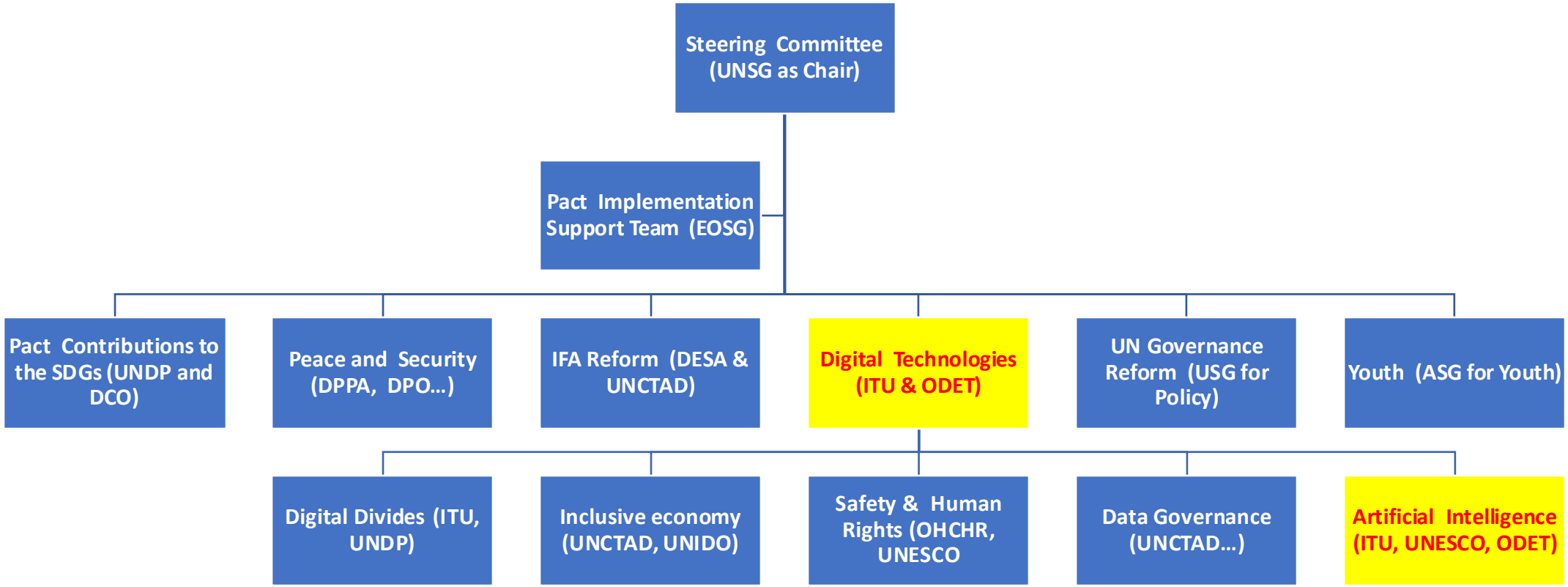
September 2024

Pact for the Future, Global Digital Compact, and Declaration on Future Generations

Relevant GDC Outputs and HLAB-AI Recommendations

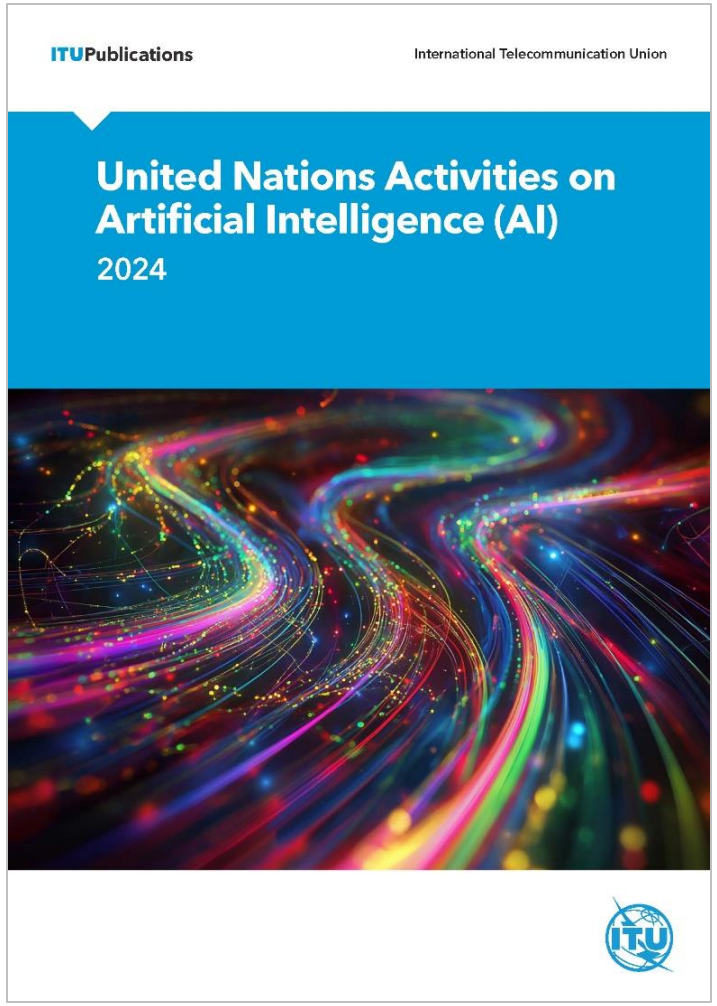
Global Digital Compact	Some relevant existing mechanisms	AI Advisory Body
GDC Para 56.a "... International Scientific Panel ... international initiatives and research networks"	**AI4G Neural Network**	**International Scientific Panel on AI** "... supported by the proposed UN AI office and other relevant United Nations agencies ..."
GDC Para 56.b "... Global Dialogue on AI Governance ... existing relevant UN conferences and meetings"	**AI4G Global Summit** **AI Governance Day**	**Policy Dialogue on AI Governance** "... twice-yearly... on the margins of existing meetings at the United Nations ..."
GDC Para 58 "... call on standards development organizations to collaborate ..."	**World Standards Cooperation** **Int'l. AI Standards Summit**	**AI Standards Exchange** "... representatives from national and international standard-development organizations ..."
GDC Para 61 "... leverage existing UN and multi-stakeholder mechanisms to support AI capacity-building ..."	**AI Hub with UNDP, et al** **AI Skills Coalition** **AI4G Impact Initiative**	**Capacity Development Network** "... to link up a set of collaborating, UN-affiliated capacity development centres ..."
GDC Para 63 "... a Global Fund on AI and that are complementary ..."	**Digital Window of the Joint SDG Fund**	**Global Fund for AI** "... creation of a global fund for AI to put a floor under the AI divide ..."
GDC Para 72 "... establishment of an office ... working closely with existing mechanisms ..."	**IAWG-AI** **UNGIS**	**AI Office within the Secretariat** "... drawing, wherever possible, on relevant existing UN entities ..."

ITU's Role in the GDC Implementation

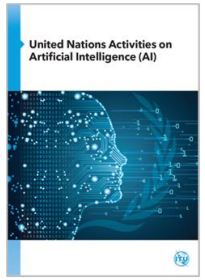


UNGA AI Resolutions

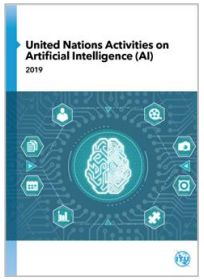
Number	Title	Action
79/325	**Terms of Reference and Modalities for the Establishment and Functioning of the Independent International Scientific Panel on Artificial Intelligence and the Global Dialogue on Artificial Intelligence Governance**	A/79/L.118 adopted on 26 August 2025 without a vote (A/79/PV.89).
79/322	**The role of Artificial Intelligence in creating new opportunities for sustainable development in Central Asia**	A/79/L.94 adopted on 25 July 2025 without a vote (A/79/PV.86) under item 18.
79/239	**Artificial intelligence in the military domain and its implications for international peace and security**	A/79/408 DR XX adopted on 24 December 2024 with a vote (159-2-5) (A/79/PV.55 (resumed)) under item 98.
78/311	**Enhancing International Cooperation on Capacity-building of Artificial Intelligence**	A/78/L.86 adopted on 1 July 2024 without a vote (A/78/PV.97) under item 13.
78/265	**Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development**	A/78/L.49 adopted on 21 March 2024 without a vote (A/78/PV.63) under item 13.



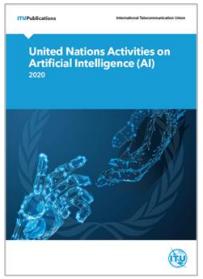
United Nations Activities on AI



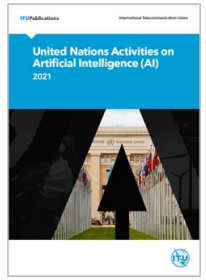
Collection of 2-pager report from 27 UN agencies



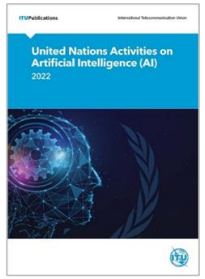
Collection of 2-pager report from 36 UN agencies



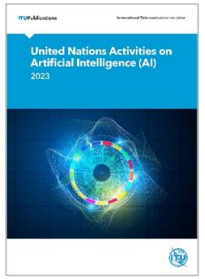
Around 260 cases run by 36 UN agencies



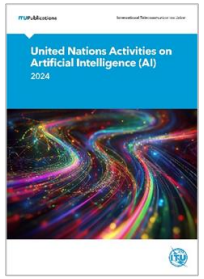
40 entities
228 projects
Executive Summary



40 entities
281 projects
Executive Summary



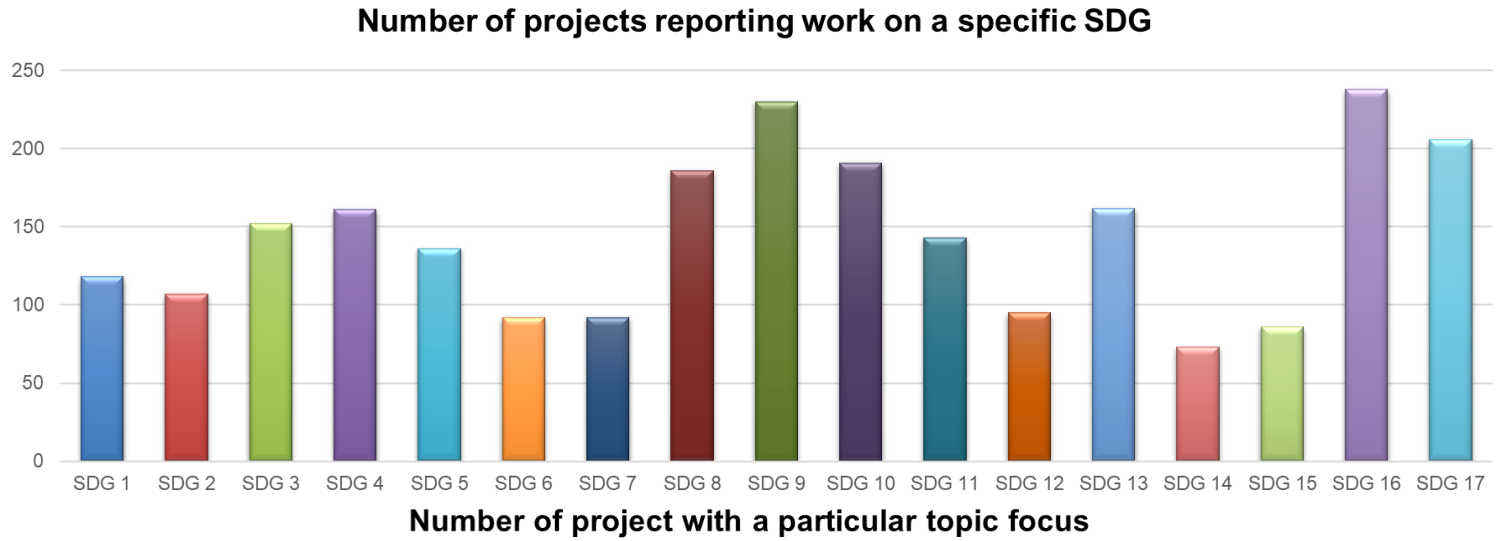
47 entities
408 projects
Executive Summary

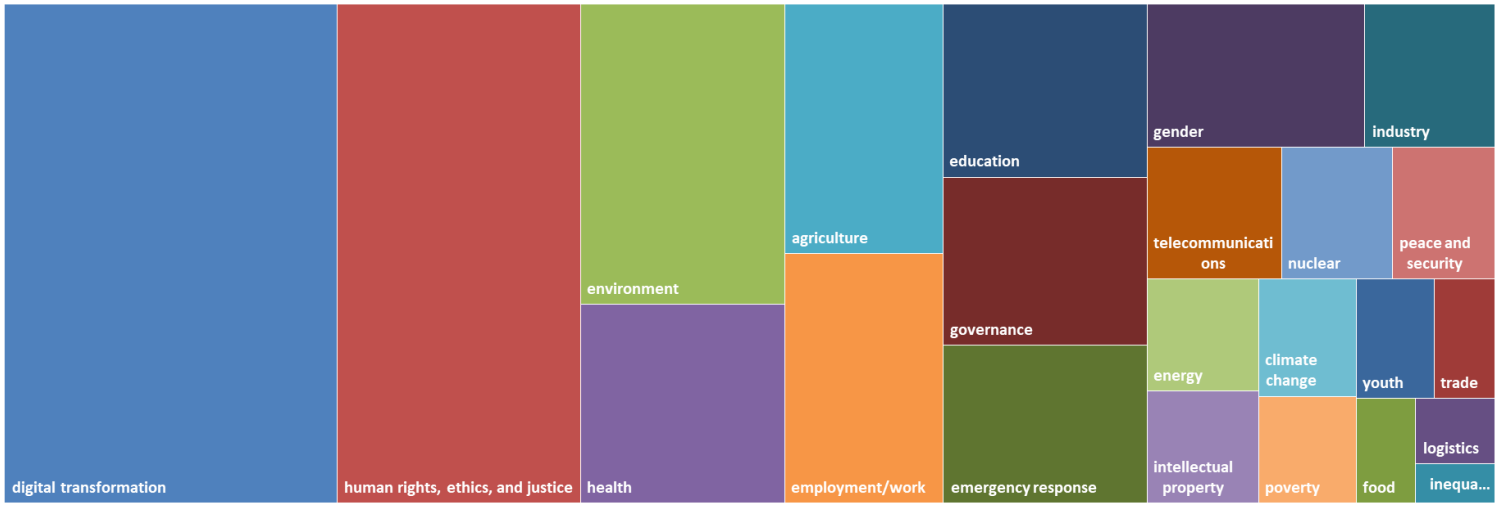


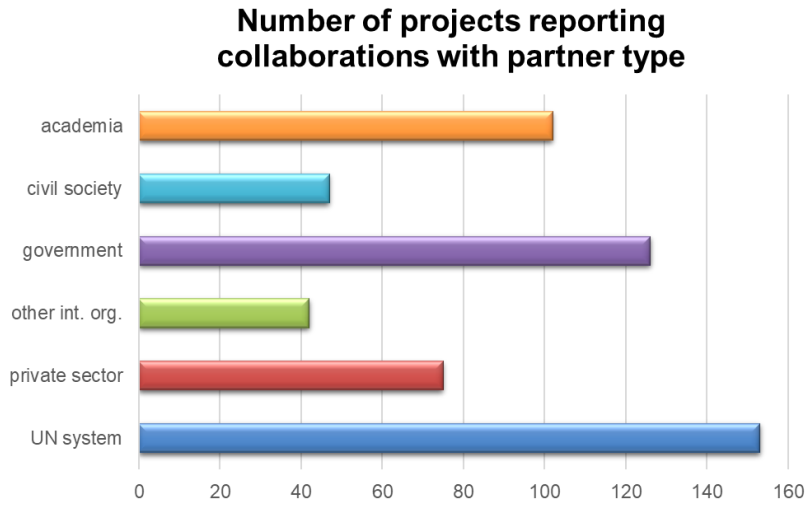
53 entities
729 projects
Executive Summary

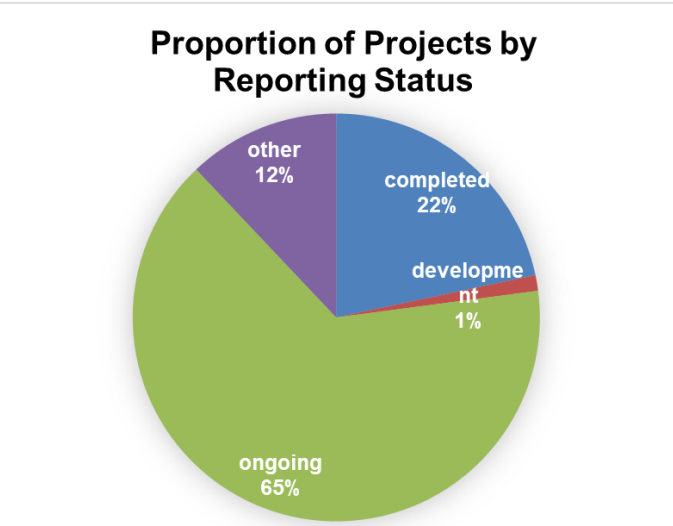
- **Started in 2018, the 2024 Report, which is the seventh version, was released at the AI for Good Global Summit 2025.**
- **Highlight AI projects run by the UN system, covering all 17 SDGs.**
- **A joint effort between ITU and 52 UN agencies and bodies.**
- **A tool for collaboration and building common understanding.**

Key Findings of the New UN Activities on AI Report









Artificial Intelligence – Areas of Action in ITU

Technical standards

Capacity development

Policy & regulatory assistance

UN system-wide coordination

Multi-stakeholder dialogue platform

ITU AI Consensus-based Voluntary Standards

+400

AI standards published or under development

Quality assessment

Energy efficiency

Multimedia

Network orchestration and management

Security

Protocols & test specs

Cable networks

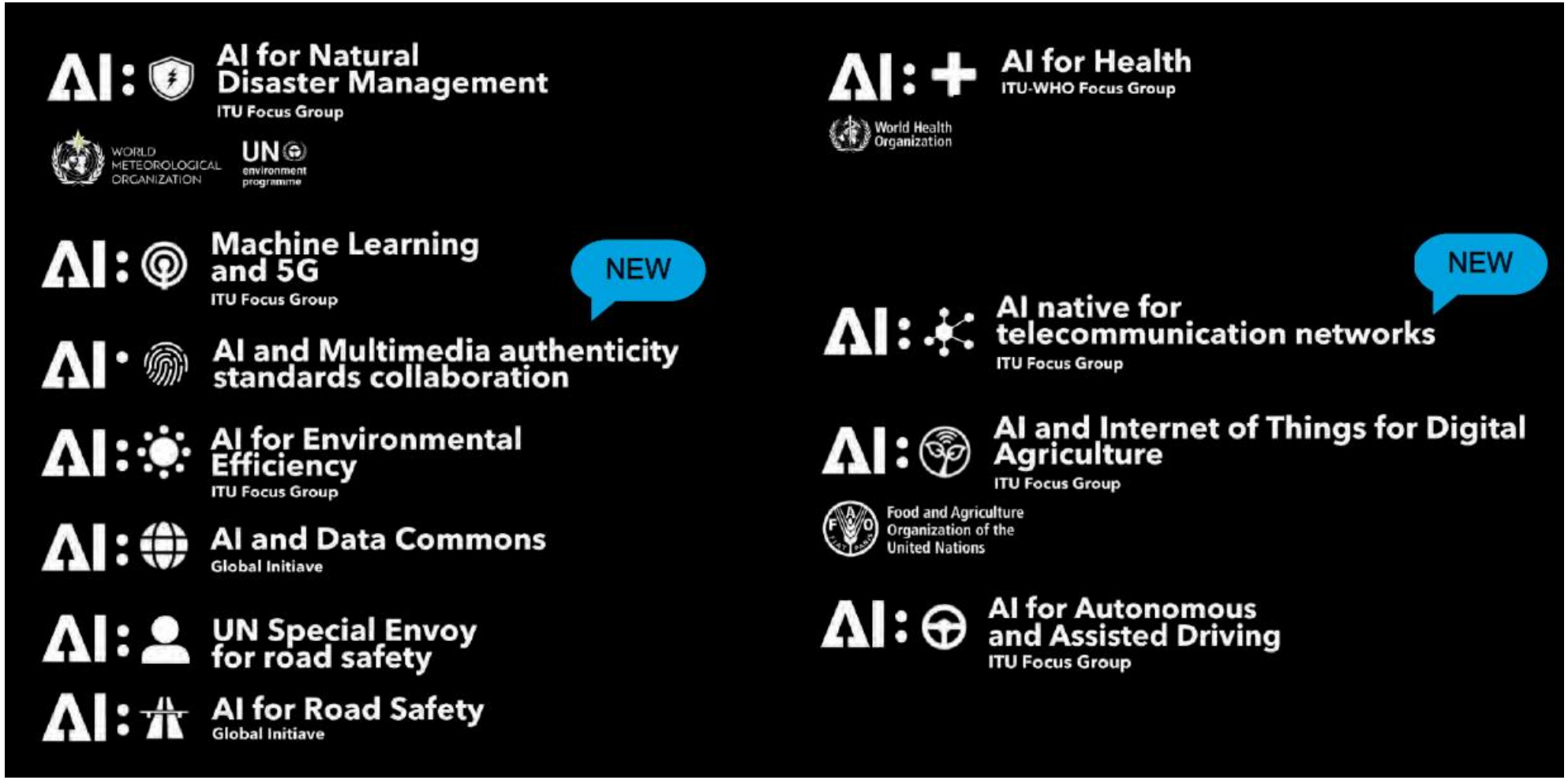
Network operations & maintenance

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), digital agriculture (ITU and FAO), and Human rights and standards (OHCHR)

UN Digital Transformation Group for Europe and Central Asia

AI-related Focus Groups & Initiatives



AI For Good Global Summit

7-10 July 2026
Geneva, Switzerland

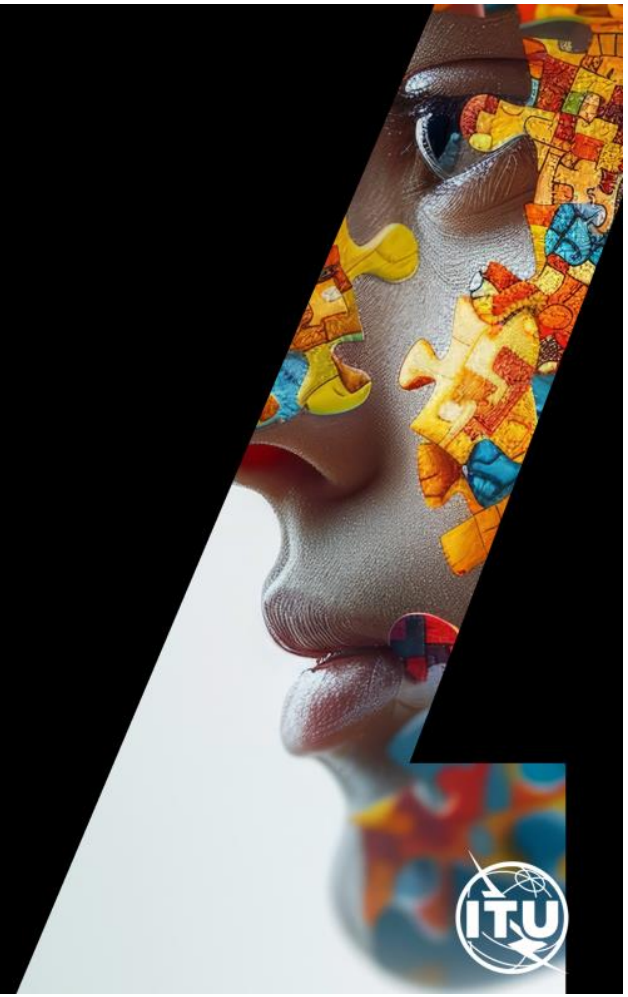
- **Accelerating SDGs:** Showcasing practical AI applications to advance the UN Sustainable Development Goals.
- **Global Collaboration:** Organized by ITU with 50+ UN agencies, co-hosted by Switzerland.
- **Inclusive Innovation:** networking, matchmaking, and equitable access to safe and trusted AI.

AI Skills Coalition

Since its launch, diverse stakeholders have expressed interest in the platform to address varying AI learning needs.

The Platform is designed around 2 key components:

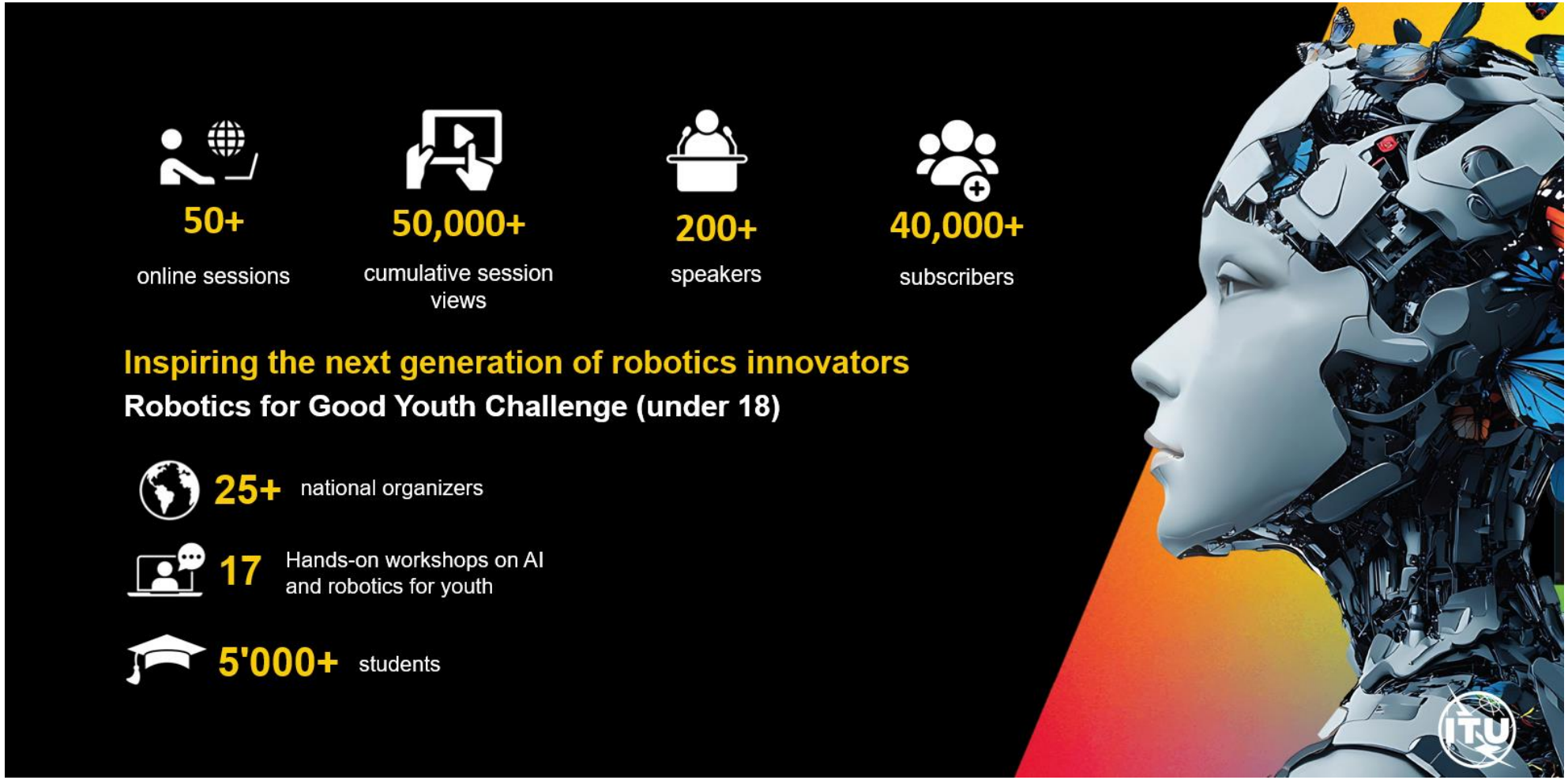
350+ Learners manifested their interest!



Training Portfolio
External Partners
ITU Academy, BSG and AI for Good

AI Skills Library
ITU Journal. Partners Research papers)

Robotics for Good Youth Challenge



AI Sub-group for EW4All: Advancing AI Across All 4 Pillars

Role of the AI Sub-group of EW4All

- The sub-group drives the integration of AI across all four pillars of the EW4All initiative.
- Unites global experts in AI & data science, disaster risk management, climate & environmental sciences.
- Aims to bridge the gap between cutting-edge AI research and the practical needs of early warning practitioners and communities worldwide.

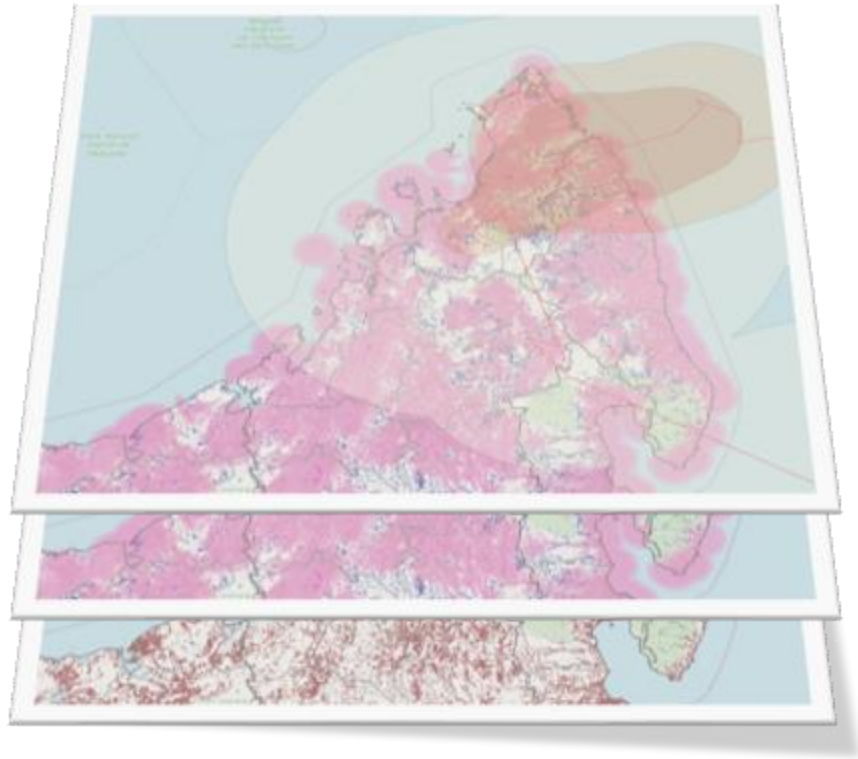
Key Activities

1. **Gap Analysis & Matchmaking:** Identify priority gaps in early warning systems and connect them with suitable AI solutions and expertise.
2. **AI Solutions Catalogue:** Create an online catalogue of AI tools, organized by hazard type, maturity level, and EW4All priorities, with peer input.
3. **Pilot Initiatives:** Launch targeted pilots in EW4All countries, supported by local stakeholders and technical experts.
4. **Resource Mobilization:** Secure funding and partnerships to develop, test, and scale AI solutions for early warnings.

AI Sub-group for EW4All: AI pilot

Early Warning Connectivity Map (EWCM)

- ITU collaborates with Microsoft AI for Good Lab, Planet, and the Institute for Health Metrics and Evaluation (IHME) at the University of Washington.
- Integrates AI with satellite imagery to create high-resolution population density maps and visualize connectivity data, to **highlight areas where people are vulnerable to natural hazards due to limited access to emergency notifications.**
- These results will guide **data-driven decisions on warning dissemination strategies** and targeted mobile infrastructure investment to ensure no one is left behind.
- The map has been piloted in countries as part of the implementation of EW4All initiative.



AI Governance Guidebook

A new guide towards collaborative AI frameworks is coming soon!

It will be available on the Digital Regulation Platform and include:

- **Practical resources for policymakers, regulators, and public leaders**
- **Support for creation of responsible, inclusive, agile AI governance frameworks**
- **Cover foundations, risks, ethics, tools, and institutional mechanisms**
- **Provide a step-by-step, comprehensive approach for decision-making across the AI lifecycle**

Digital Innovation Profile for Georgia (2023)

Provides an overview of the ecosystem support available for AI:

- **AI Ecosystem Development:** **Georgia's AI ecosystem is supported by academic institutions, startups, and government programs, working to foster AI adoption across industries.**
- **Infrastructure & Resources:** **cloud computing and infrastructure; broadband expansion projects.**
- **Programmes, associations & networks:** **play a key role in building AI capacity, supporting research, and creating collaboration opportunities.**
- **AI Applications:** **AI is being applied in finance, agriculture, and health sectors, with pilot projects and startup initiatives driving practical use cases.**
- **Policy and Government Support:** **policy efforts and innovation programs that integrate AI into the broader economy, aligning with the country's digital transformation strategy.**
- **Opportunities & Challenges:** **AI support is emerging, however, capacity-building, AI talent development, funding, infrastructure, and stronger links between academia and industry are needed.**
- **Recommendations:** **detailed strategies and actions are listed.**

CIS Region Activities

Planned Regional Initiative to be discussed and adopted in the World Telecommunication Development Conference 2025 (17-28 November 2025) for implementation in 2026-2029 cycle

DRAFT - Development and implementation of artificial intelligence technologies

Objective: The emergence of artificial intelligence technologies is creating a wide range of opportunities for using them to solve problems facing the communications sector in CIS countries.

Expected results:

1 Investigation of the use of artificial intelligence to improve quality of life for persons with disabilities and specific needs, including people with autism spectrum disorders;

2 Introduction of digital platforms based on artificial intelligence and big data to provide metrics on the information society and sustainable development;

3 The application of artificial intelligence and related technologies to monitor climate and environmental parameters;

4 Formation of a regional branch of the AI for Good platform for development purposes.

Asia and the Pacific Activities

"Enhancing the Development of Standard and Frameworks for Critical Technologies in Southeast Asia"

Scope:

- **Critical Technology**: Artificial Intelligence (AI)
- **Standard & Framework**: Gender and Social Based Standard and Policy

Focus countries:

- Indonesia
- Malaysia
- Thailand
- The Philippines

*The rest of the ASEAN countries are secondary beneficiary countries

Food and Agriculture Organization of the United Nations

Harnessing **AI** for sustainable agrifood systems transformation

Daniela Di Gianantonio

Head of Digital Agriculture, FAO

The AgriTech Revolution

The AI-powered agriculture is creating a new paradigm shift

Ag 1.0	Ag 2.0	Ag 3.0	Ag 4.0	Ag 5.0
TRADITIONAL FARMING	**MECHANIZED AGRICULTURE**	**BIOTECH AGRICULTURE**	**PRECISION AGRICULTURE**	**AI-POWERED AGRICULTURE**
Manual labor, animal power, basic tools like ploughs, no science-based methods	Introduction of tractors, mechanical ploughs, harvesters, basic irrigation	GMOs, synthetic fertilizers, pesticides, high-yield crop varieties	GPS-guided machinery, drones, IoT sensors, Big Data, GIS, blockchain	AI for predictive analytics, autonomous tractors, computer vision, robotics

Pre-19th Century	19th-Mid 20th C	1960s – 1980s	1990s-2010s	2020s-Now
Low yield, high labour	Industrial Revolution	Driven by genetics-science and chemistry	Internet-era technologies	Driven by GenAI and autonomous intelligent systems

AI for sustainable agrifood systems

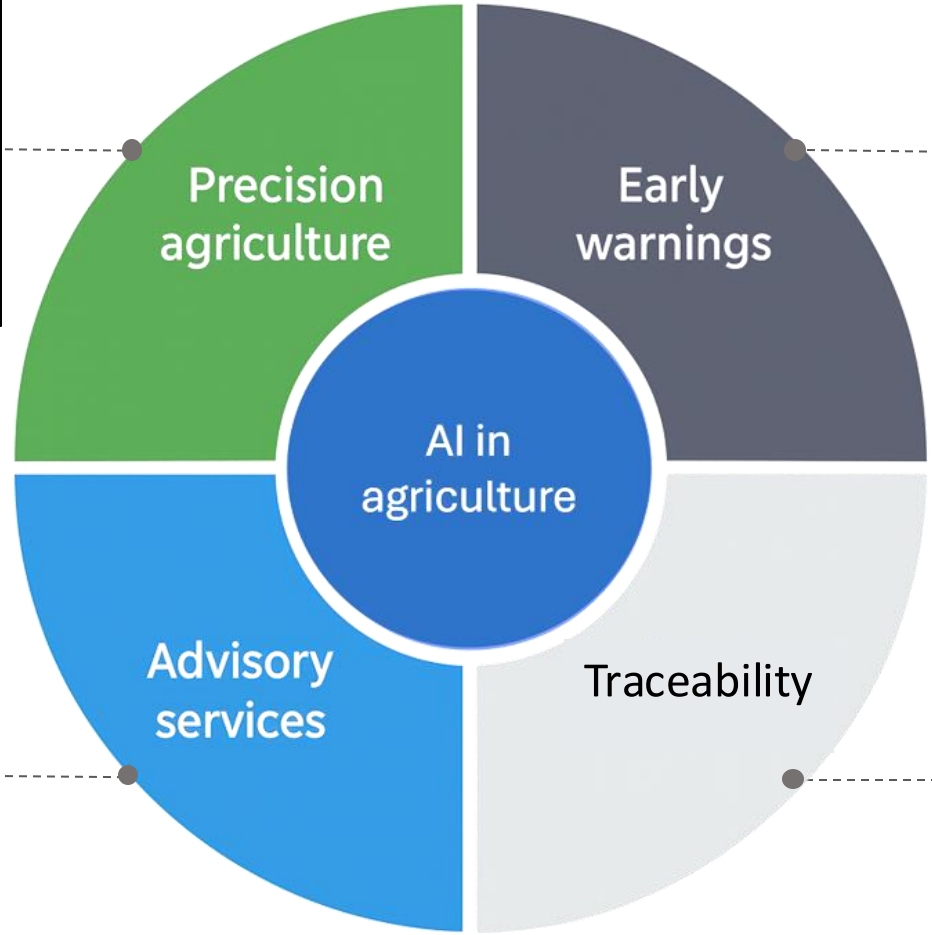
The application of techs in agriculture goes beyond production, transforming agrifood systems

Resource optimization

AI-driven analytics from satellite imagery, drones, and IoT sensors help optimize water, fertilizer, and pesticide use; *agrobots and smart machinery* to reduce labor intensive tasks

Climate resilience and risk management

AI-powered predictive models support farmers and policymakers with early warnings on weather extremes, pest outbreaks, and crop diseases, helping regulators devising better policies and interventions



Personalized recommendations

AI-powered virtual agents (e.g. chatbots) deliver tailored, real-time guidance to farmers on planting, irrigation, pest control, and market choices, improving decision-making at the farm level

Supply chain efficiency and transparency

Machine learning enhances forecasting, logistics, and traceability across the food system, cutting losses and ensuring safer, more transparent food chains

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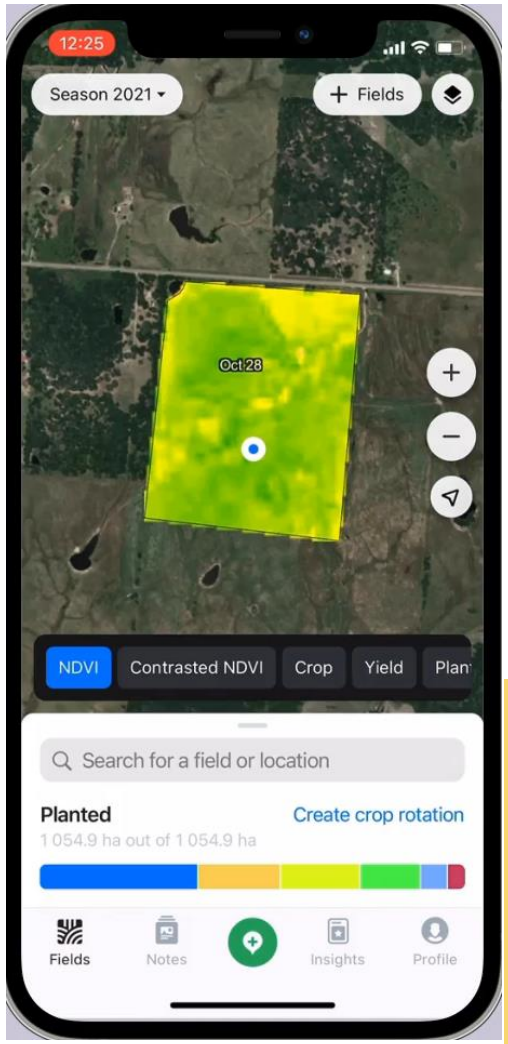
AI-driven analytics from satellite imagery, drones, and IoT sensors help optimize water, fertilizer, and pesticide use;
agrobots and smart machinery to reduce labor intensive tasks

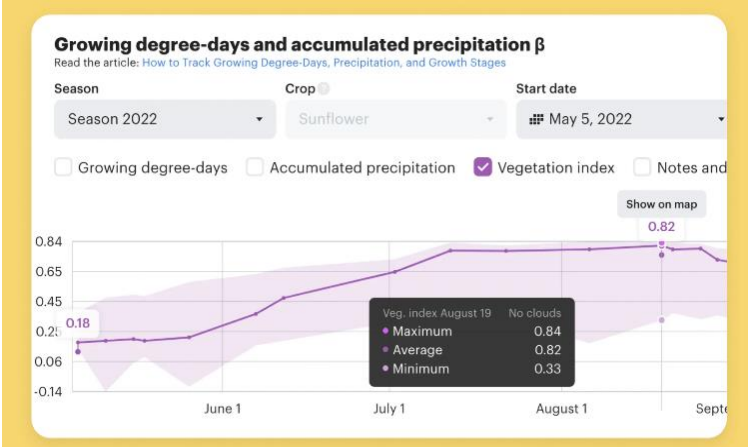
Precision agriculture

Source: IRRIGOPTIMAL, Wes Trade



Source: www.onesoil.ai

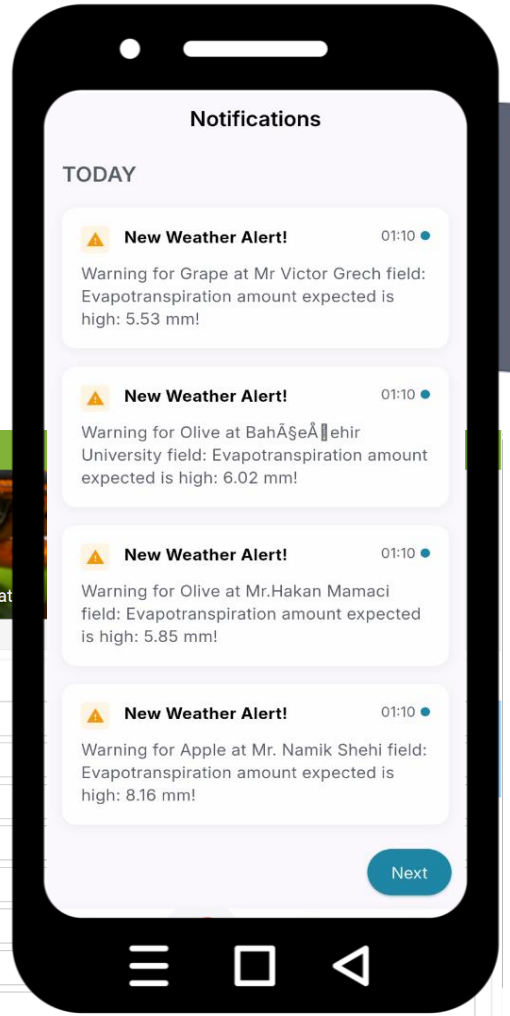
Source: FAO



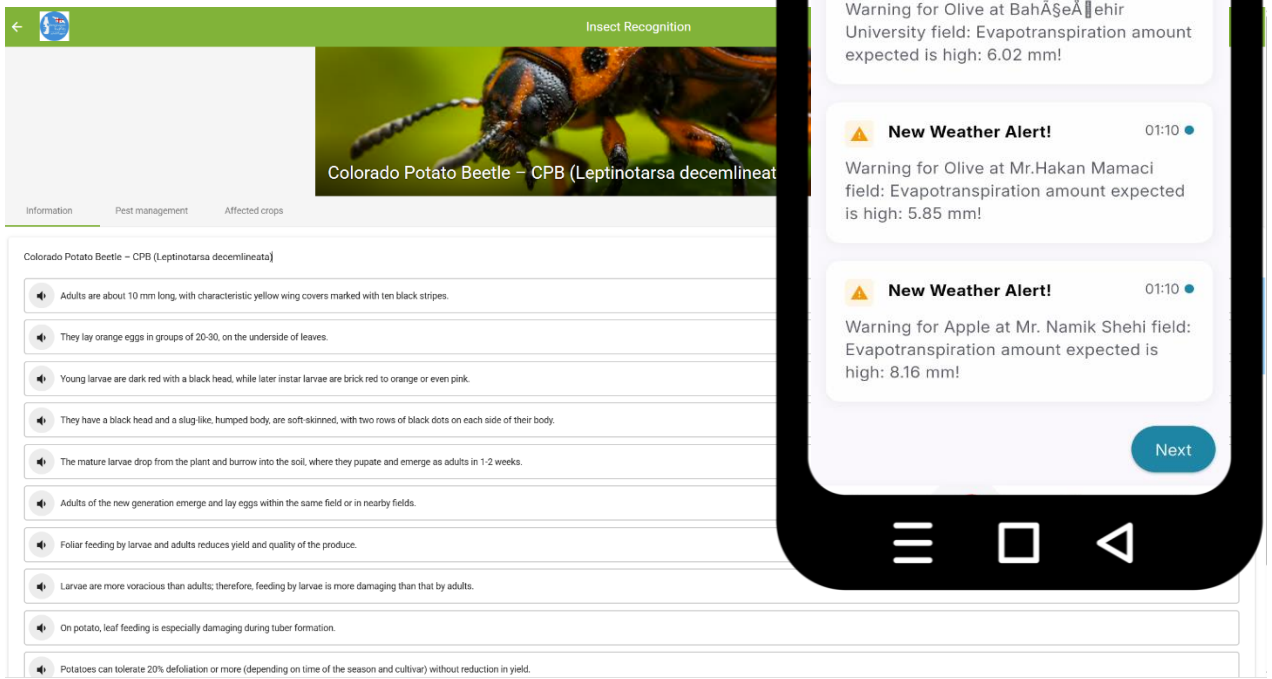
AI for sustainable agrifood systems

The application of techs in agriculture goes beyond production, transforming agrifood systems

Source: IRRIGOPTIMAL



Source: FAO



Early warnings

Climate resilience and risk management

AI-powered predictive models support farmers and policymakers with early warnings on weather extremes, pest outbreaks, and crop diseases, helping regulators devising better policies and interventions

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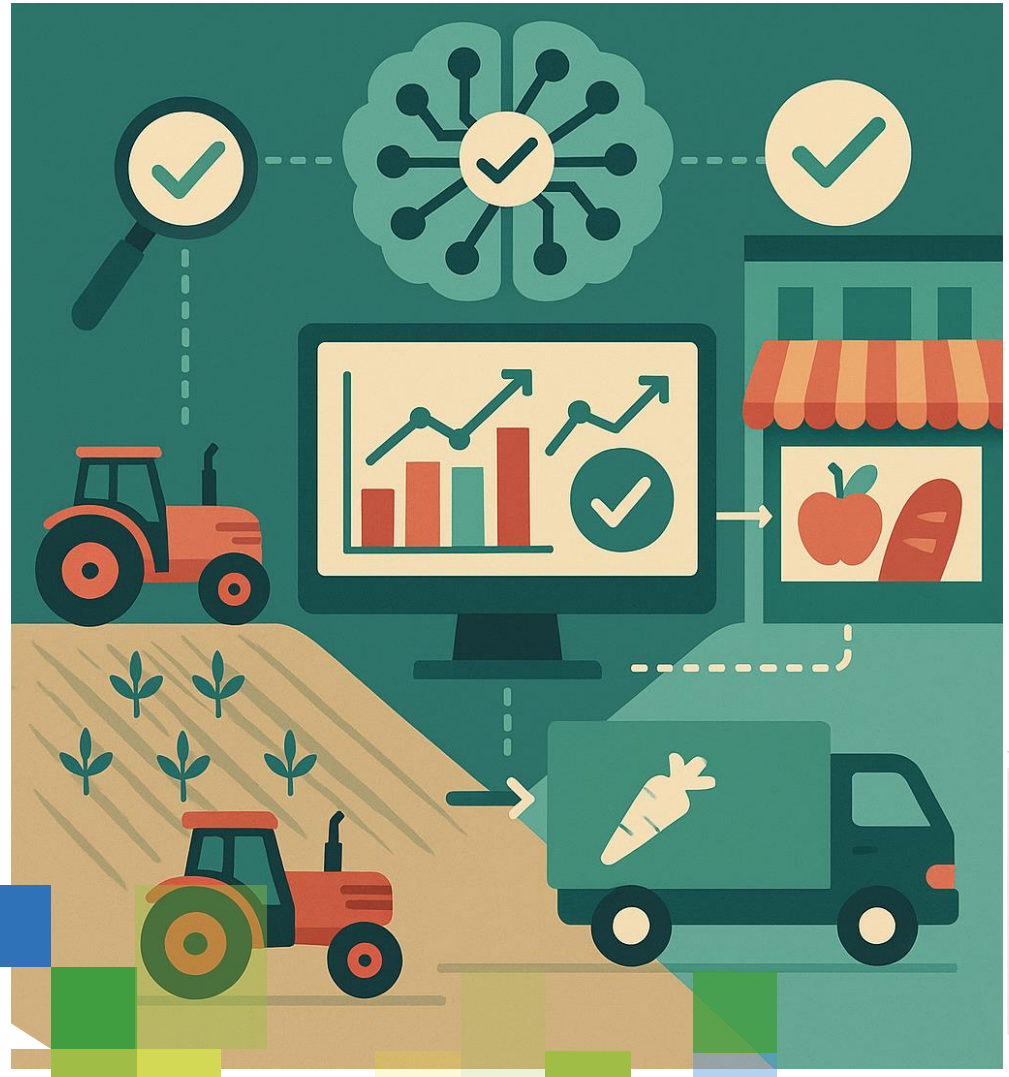


Traceability

Supply chain efficiency and transparency

Machine learning enhances forecasting, logistics, and traceability across the food system, cutting losses and ensuring safer, more transparent food chains

AI for sustainable agrifood systems

The application of techs in agriculture goes beyond production, transforming agrifood systems

Personalized recommendations

AI-powered virtual agents (e.g. chatbots) deliver tailored, real-time guidance to farmers on planting, irrigation, pest control, and market choices, improving decision-making at the farm level

Advisory services

Source: www.digitalgreen.org/farmer.chat

FAO Digital Villages Initiative in Georgia

Harnessing AI to enhance agriculture productivity and access to early warnings in the Marneuli villages

www.fao.org/digital-villages-initiative/europe/

INCREASE AGRICULTURE PRODUCTION

Stimulating the use of ICTs and digital technologies in agricultural production

IMPROVE ACCESS TO SERVICES

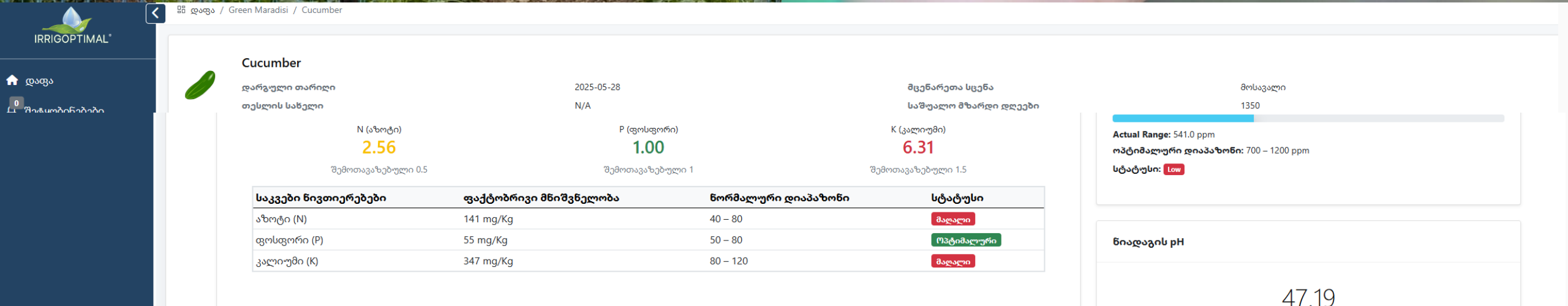
Enhancing farmers' access to services via ICT and digital means

ENHANCE RURAL LIVELIHOODS

Improving the delivery of digital rural services and improving capacities for the entire rural community

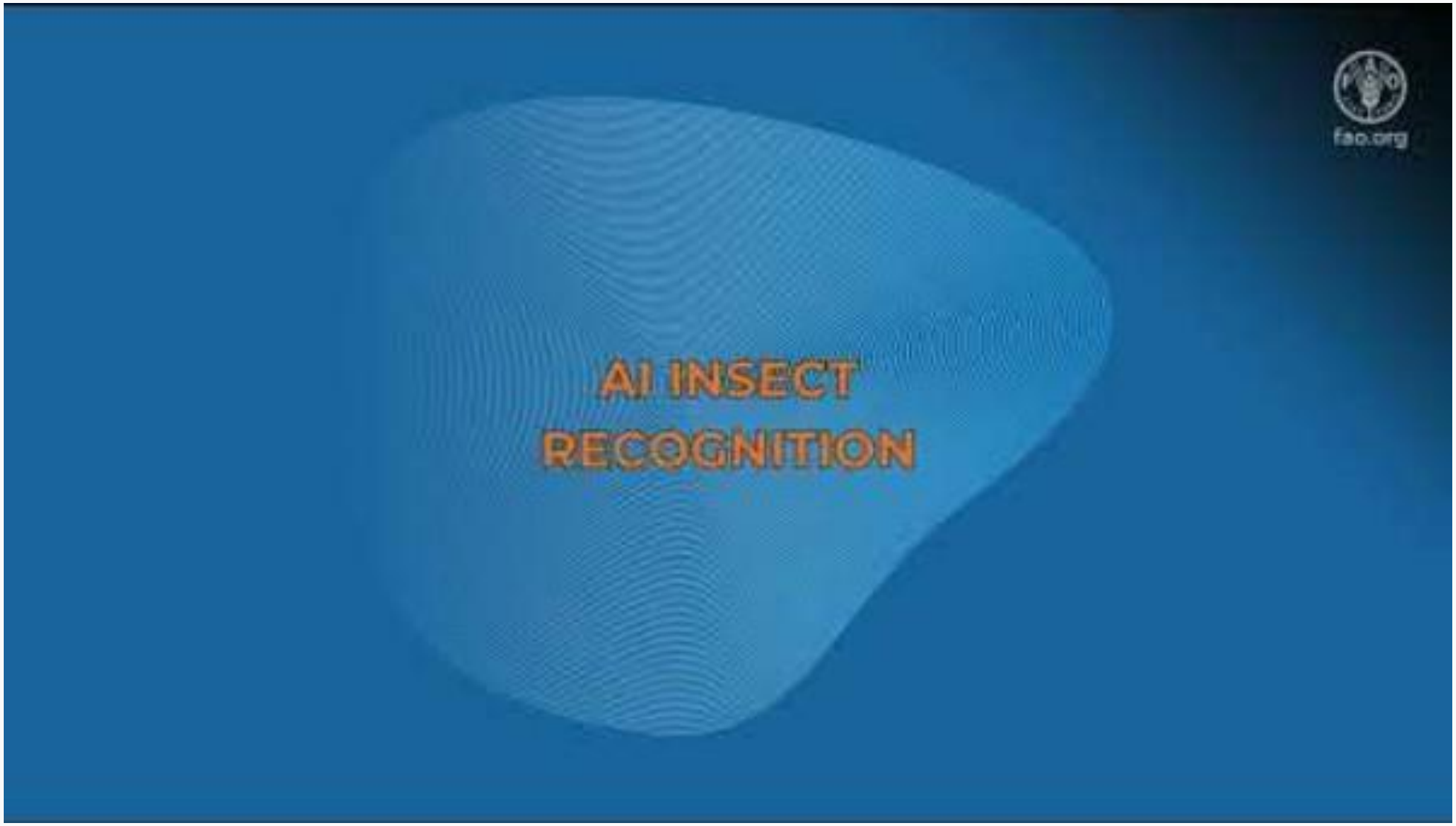
Enabling precise irrigation through AI in Georgia

Machine learning models provide farmers' irrigation advice such as irrigation schedule, irrigation windows, recommended water amount, irrigation duration



AI-advisory services and insect recognition in Georgia

FAO's Digital Services Portfolio (DSP) detects the most common insect pests in Georgia and provides advisory on how to treat them



Sustainable, responsible and ethical AI pathways

INVEST IN DATA GOVERNANCE AND DATA ECOSYSTEMS (DPI-Agri)

CREATE ENABLING AND INCLUSIVE POLICY FRAMEWORKS

PROMOTE INCLUSIVE AI-INNOVATION AND CO-CREATION WITH RURAL COMMUNITIES

STRENGHTHEN INTERNATIONAL COLLABORATION AND FORESIGHT

RAISE AWARENESS, DEVELOP DIGITAL SKILLS TO FOSTER AI ADOPTION

Source: Author's own elaboration

FAO AgriTech Observatory

The first open knowledge repository for digital agriculture developments in the region

https://agritechobservatory.fao.org/

Food and Agriculture Organization of the United Nations | AGRITECH OBSERVATORY

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AgriTech Observatory

Navigate digital agriculture developments in Europe and Central Asia

Filters

Type

Country or territory

Use case

Theme

Technology

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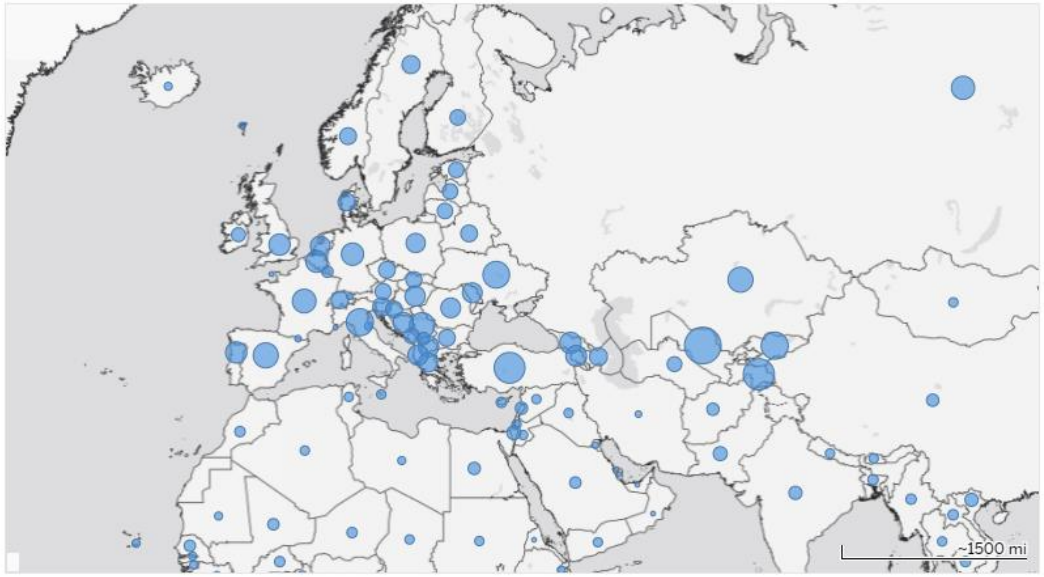
Initiatives

List of initiatives

276 initiatives in **208** countries or territories

Countries and territories

Disclaimer



List of initiatives

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SOLUTION
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Agribusiness advisory service
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Regional offers of on-farm diversification activities and contacts
ORIGIN: BELGIUM
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SOLUTION
Accueil Paysan
Portal for the promotion of farm accommodation and activities
ORIGIN: FRANCE
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SOLUTION
Adopt an Olive Tree
App and sensors supporting an "adopt an olive tree" programme in Oliete Smart Village
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ORIGIN: UKRAINE
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Thank you!

Daniela Di Gianantonio

Head of Digital Agriculture

FAO Regional Office fore Europe and Central Asia

REU-digital-agriculture@fao.org

AI For Good: UNESCO

What Can UNESCO Offer? An Overview

- Supports countries in developing strategies, plans, and regulations for safe, inclusive, and quality use of AI which centers the human

- In 2019, organized the Beijing Consensus, which highlights key priorities for AI in education

What Can UNESCO Offer? A Thought Leader

Addresses critical questions around topics:

- Preserving the diversity of knowledge systems
- AI innovation and regulation
- Balancing investment in AI capabilities & human capabilities
- The role of education in AI in shaping perception & development

From UNESCO's Recommendation on the Ethics of Artificial Intelligence

What Can UNESCO Offer? Guiding Teachers/Learners

- Helps education stakeholders steer & build a deeper understanding of AI
  - In 2024, established the AI Competency Frameworks for Teachers and Students
  - With UNESCO's support, Chile's Ministry of Education launched the "Guiding Framework for Teachers' Digital Competencies" in June 2025

Table 1. AI competency framework for students

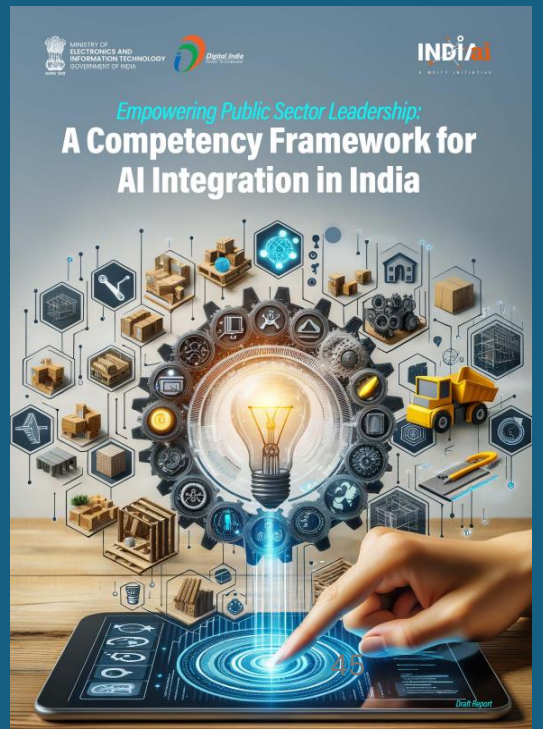
Competency aspects	Progression levels		
	Understand	Apply	Create
• Human-centred mindset	• Human agency	• Human accountability	• Citizenship in the era of AI
• Ethics of AI	• Embodied ethics	• Safe and responsible use	• Ethics by design
• AI techniques and applications	• AI foundations	• Application skills	• Creating AI tools
• AI system design	• Problem scoping	• Architecture design	• Iteration and feedback loops

Table 1. The AI competency framework high-level structure: aspects and progression levels

Aspects	Progression		
	Acquire	Deepen	Create
1. Human-centred mindset	Human agency	Human accountability	Social responsibility
2. Ethics of AI	Ethical principles	Safe and responsible use	Co-creating ethical rules
3. AI foundations and applications	Basic AI techniques and applications	Application skills	Creating with AI
4. AI pedagogy	AI-assisted teaching	AI–pedagogy integration	AI-enhanced pedagogical transformation
5. AI for professional development	AI enabling lifelong professional learning	AI to enhance organizational learning	AI to support professional transformation

What Can UNESCO Offer? Helping Governments Leverage AI

- Provides governments with a roadmap for efficient, effective and inclusive service delivery
  - In 2022, established the "Digital Competency Framework" for civil servants
  - In 2024, collaborated with the International Telecommunication Union (ITU) to create a course on AI for the public sector
  - Inspired by UNESCO, India recently launched a "Competency Framework for AI" to enhance its public service delivery



UNESCO and AI: Summary and Looking Toward the Future

- Ensures human-centric, ethical, and competence-based approach
- In line with the guiding principles of the EU on trust, accountability, skills, and human-centered approaches. *Competences and governance practices for artificial intelligence in the public sector* (2024)

- Upcoming: more AI initiatives planned this year

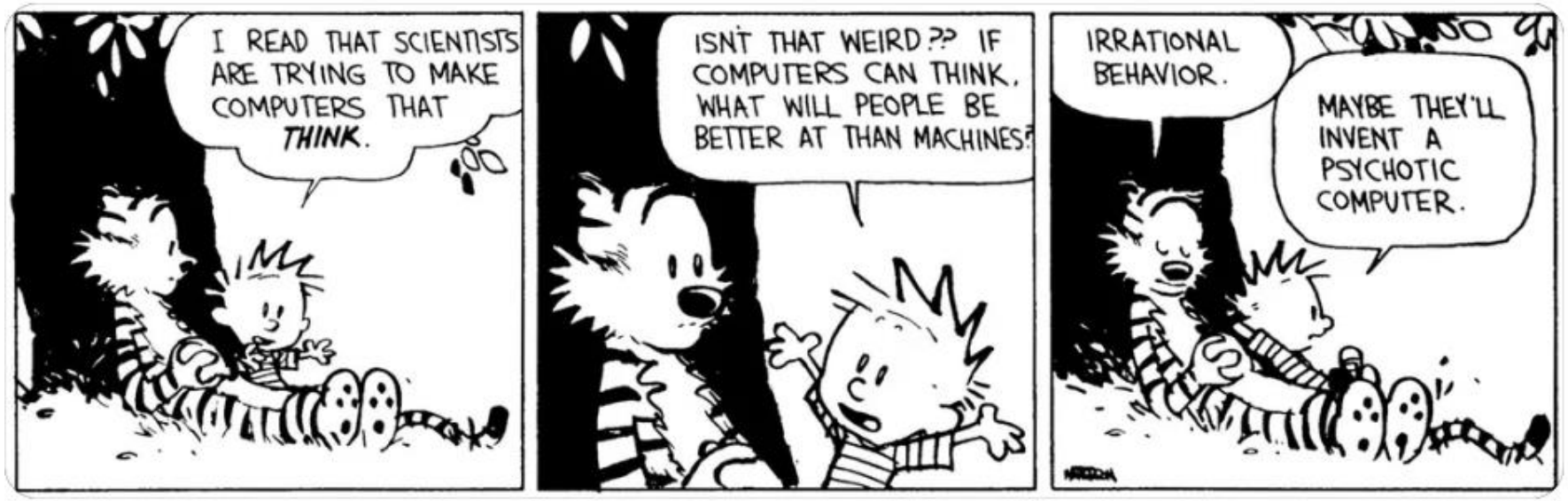
Links to Sources

- **Beijing Consensus:** https://unesdoc.unesco.org/ark:/48223/pf0000368303
- **Critical Thought on AI:** https://unesdoc.unesco.org/ark:/48223/pf0000385877 and https://unesdoc.unesco.org/ark:/48223/pf0000385082.page=4
- **Competency Framework for Teachers and Students:** https://www.unesco.org/en/articles/what-you-need-know-about-unescos-new-ai-competency-frameworks-students-and-teachers?hub=32618, https://unesdoc.unesco.org/ark:/48223/pf0000391105 (students), and https://unesdoc.unesco.org/ark:/48223/pf0000391104 (teachers)
- **Chile's Framework for Teachers:** https://www.unesco.org/en/articles/launch-guiding-framework-teachers-digital-competencies
- **Digital Competency Framework for Civil Servants:** https://unesdoc.unesco.org/ark:/48223/pf0000383325
- **India's Competency Framework for AI in the Public Sector:** https://www.unesco.org/en/articles/india-launches-ai-competency-framework-transform-public-service
- **The EU's Competences and governance practices for AI in the public sector:** https://publications.jrc.ec.europa.eu/repository/handle/JRC138702

AI @ UNICEF

Artificial Intelligence (AI)?

A field of computer science that **teaches computers** how to reason **more like humans**



Why AI?

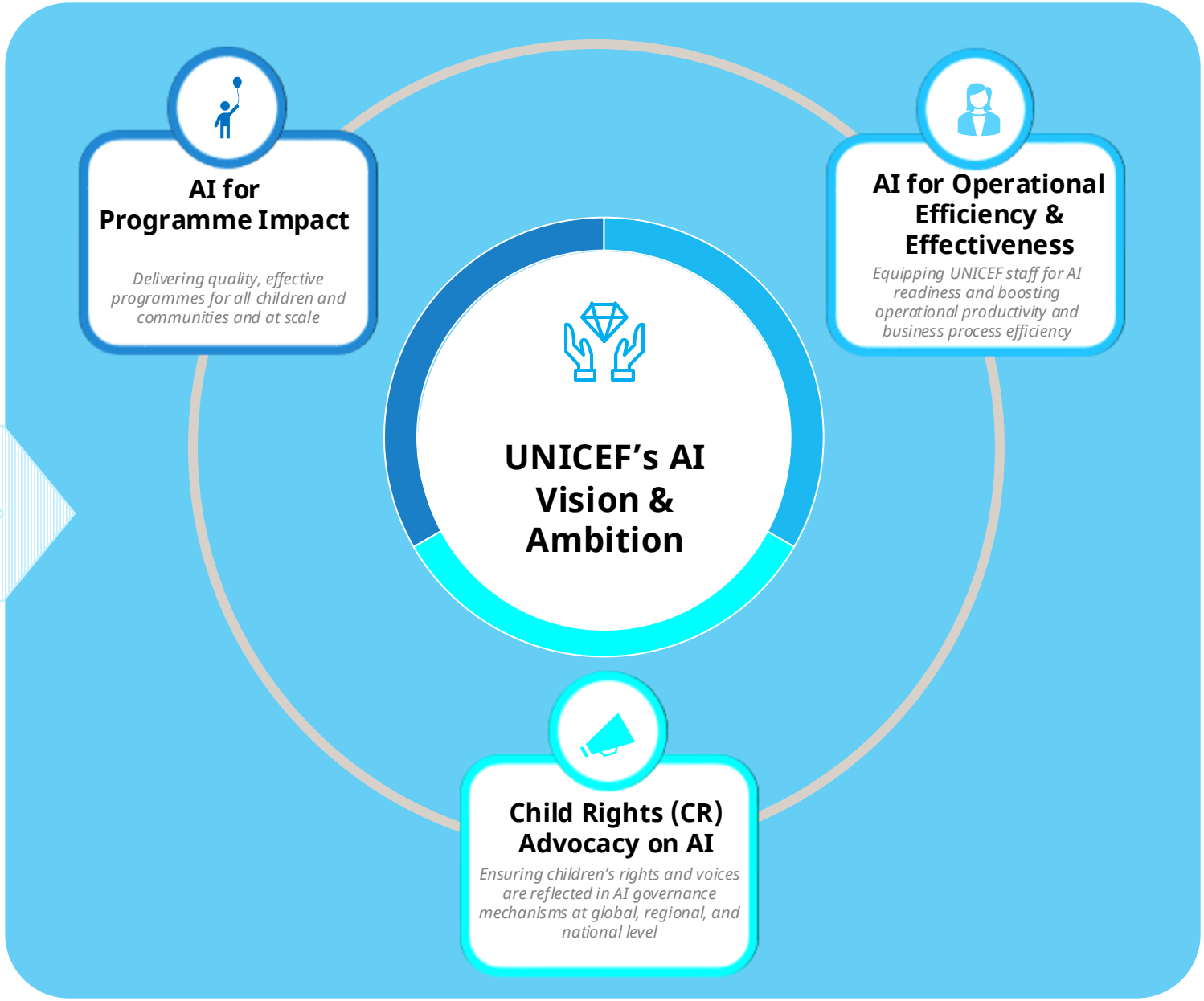
- **AI** offers transformative potential to overcome these challenges and advance children's well-being.

- Undoubtedly, with **power comes responsible use and implementation of AI**, especially concerning the well-being of children, for instance to benefit from the rapidly evolving landscapes.

- The work at the centre is about realizing tangible **digital impact for every child**, ensuring they grow, learn, play, dream and live in a world where digital technology serves their well-being and unlocks their full potential.

Vision & Ambition for AI: UNICEF AI Strategy 2025 - 2030

Forward-looking unified approach to AI aimed at enhancing ***programme impact, improving operational efficiency and effectiveness, and advocating for AI that supports children's rights***



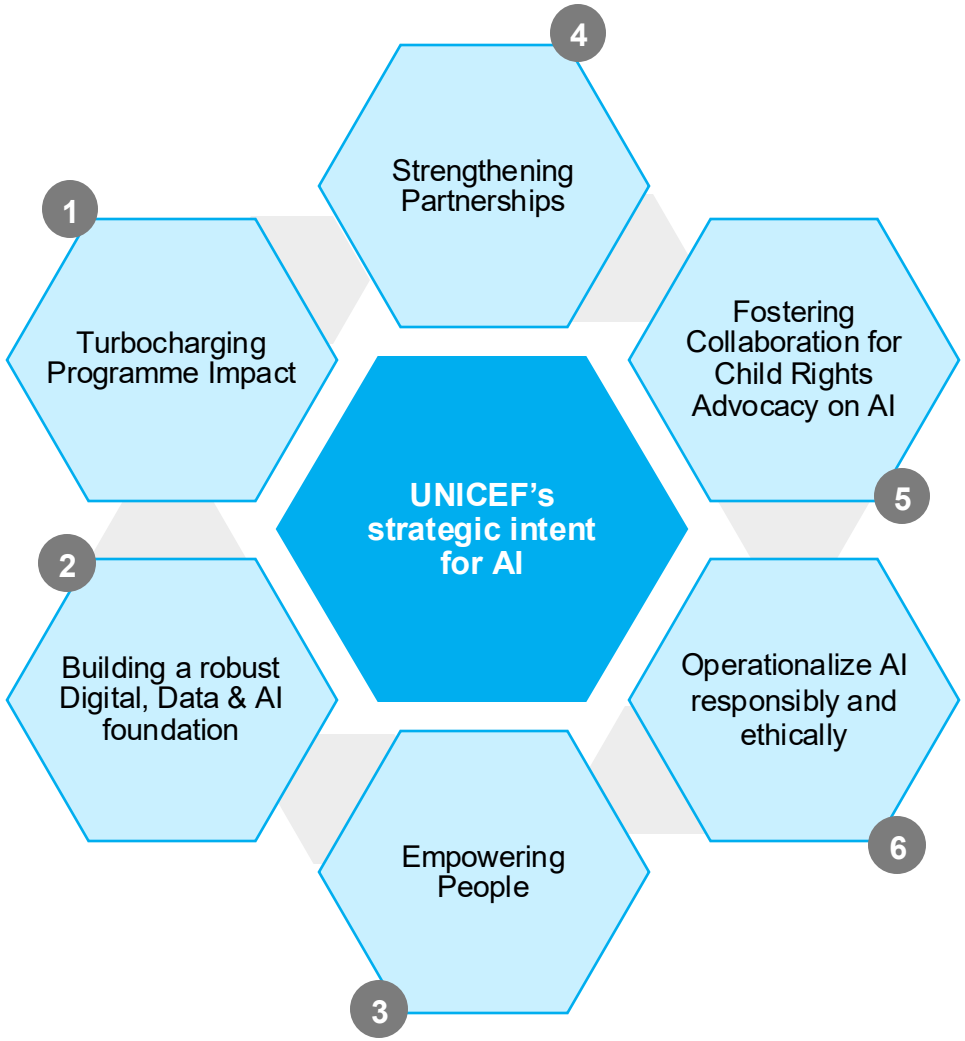
Key dimensions of UNICEF's Strategic Intent for AI

Impact for Children at scale with:

- **Inclusion** of diverse populations to ensure equitable access
- **Sustainable** practices for long-term viability
- **Curating culturally contextualized** solutions for reaching children
- Solutions that **strengthen systems**

- Establishing the **right infrastructure to build** scalable systems
- Ensuring **transparency, accuracy & data interoperability**

- **Operational Efficiencies**: AI to drive transactional efficiencies
- **Empowering talent:** Building capacity through development programs and upskilling initiatives

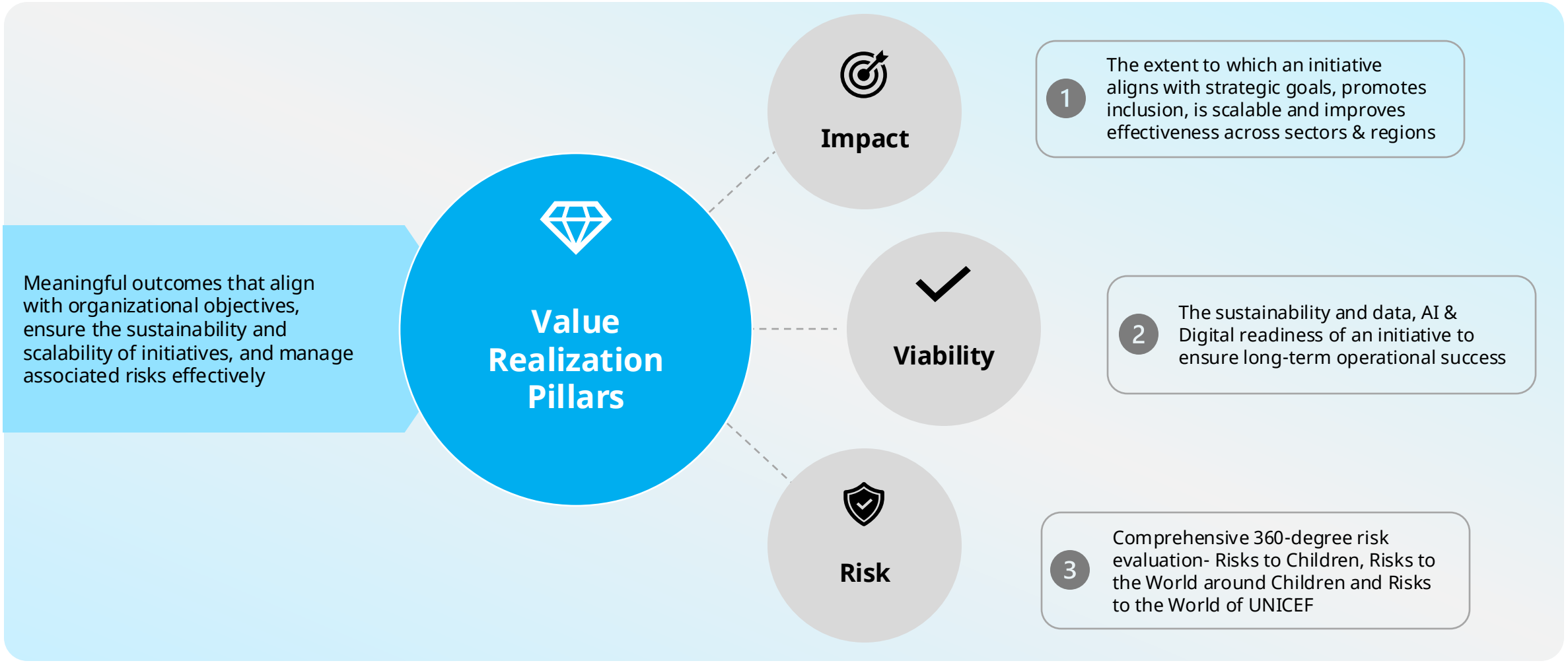


- **For Partners:** Developing AI solutions that foster partners goals
- **With Partners:** Collaborating to harness AI opportunities together
- **By Partners:** Achieving results through partner driven frameworks and initiatives

- Enhancing **global and local engagement for effective advocacy**, ensuring that **children's rights, voices and safety** are reflected in AI governance mechanisms at global, regional, and national level

- Ensuring **Ethical AI** that does no harm, minimize risks, mitigate biases and is respectful
- Prioritizing **accountability** in AI operation **through responsible implementation, management and impact monitoring**

Value Realization Framework for Organizational Initiatives



Some AI-enabled initiatives in pipeline

Sl. no	AI initiative	Division	Stage	Archetype	Description
1	**Accessible Digital Textbooks (ADT)**	Education	Developing	AI for Programme Impact	Enable the **cost-effective development of ADTs**, overcome key barriers to scale-up, and spark new and innovative ways to transform learning and meet the diverse needs and abilities of learners
2	**Vaccine Stockout Prediction**	Health	Developing	AI for Programme Impact	To consolidate the gains, address the outstanding barriers, and leverage the full potential of data used for planning and decision-making, UNICEF is planning to deploy **machine learning models, artificial intelligence solutions, and synthetic data on Thrive360 and Data Control to predict and prevent risks in immunization supply chains**
3	**AI to support community health workers**	Health	Discovery	AI for Programme Impact	Exploring opportunities to leverage AI to better support CHW – for example by enhancing training, providing information, and assisting decision-making. We are currently in the process of identifying country offices with which to partner and curating already-available solutions which could be integrated into, or leveraged for, this effort
4	**Cash Transfer Fraud Detection**	Humanitarian	Developing	AI for Programme Impact	Leveraging **predictive AI to enhance fiduciary assurance** measures in its cash transfer activities, particularly in detecting financial anomalies

UNICEF's Advisory Role in Government-Led AI Initiatives

UNICEF's role as an advisor

- provide guidance on **best practices leveraging its internal frameworks** *(e.g., Value Realization Framework, Risk Triage, AI Risk Assessment Framework, Partnership Framework)* **for strategic direction**
- assess key risks, **including potential direct harm to children, the world around children and reputational risks** for both governments and UNICEF
- provide insights into the **social and ethical implications** of AI-driven tools, supporting governments in making informed decisions
- use **Risk Assessment Framework to assess whether to partner on such initi**atives

Thank you!

Shaping the future of digital health transformation and AI in the European Region

Ryan Dos Santos – Technical Office – Data, Evidence and Digital Health

Keyrellous Adib – Technical Office – Technical officer (Data Science and Digital Health)

WHO Regional Office for Europe

Risks and challenges

- Bias
- Safety
- Explainability and transparency
- Responsibility and accountability
- Privacy and informed consent
- Climate change

In this presentation

- ❑ What we do best and where we can improve
- ❑ Our mandate WHO European Region
- ❑ Work done and work ahead of us

World Health Organization
European Region

What we do best

★ Top opportunities

70% 35/50 countries rate **using AI** in improving patient care and health outcomes as highly relevant

83% 44/53 countries have a **national digital health policy** or strategy

68% 33/50 countries have a **health data hub** at regional or national level

87% 45/52 countries have a national **EHR system**, interconnected regional EHRs, or a patient portal

Where we can improve

★ Top challenges

48% 24/50 countries identified **legal uncertainty** as a major challenge to adopting AI

28% 14/50 countries have guidelines to address ethical implications of AI

52% **27/52 countries have digital health literacy policies**

19% 7/39 countries have guidance for **evaluating digital health interventions**

Case Example: Transforming stroke care in the UK with AI

In a trial across 37 hospitals, stroke treatments using AI increased by over 280%

- NHS goal was to test and evaluate AI tools that could improve patient care
- Brainomix 360 AI helps doctors make faster, more accurate treatment decisions for stroke patients
- Stroke doctors reported that AI made decision-making faster, helped identify eligible patients, and improved communication
- Brainomix 360 is now used in every NHS stroke ward

WHO mandates on digital health

Global mandate

World Health Organization. (2021). Global strategy on digital health 2020-2025. World Health Organization. https://iris.who.int/handle/10665/344249

Regional mandate

Regional Committee for Europe, 72nd session. (2022). Seventy-second Regional Committee for Europe: Tel Aviv, 12–14 September 2022: Regional digital health action plan for the WHO European Region 2023–2030. World Health Organization. Regional Office for Europe. https://iris.who.int/handle/10665/360950

Regional Committee for Europe, 74th session. (2024). Seventy-fourth Regional Committee for Europe: Copenhagen, 29–31 October 2024: leveraging digital transformation for better health in Europe: Regional digital health action plan for the WHO European Region 2023–2030. World Health Organization. Regional Office for Europe. https://iris.who.int/handle/10665/378406

World Health Organization
European Region

Regional Digital Health Action Plan 2023-2030

Setting up a regional direction: Strategic objectives

World Health Organization
European Region

Regional Committee for Europe
72nd session

Tel Aviv, Israel, 12–14 September 2022

EUR/RC72/5
Provisional agenda item 3

1 August 2022 | 220529

ORIGINAL: ENGLISH

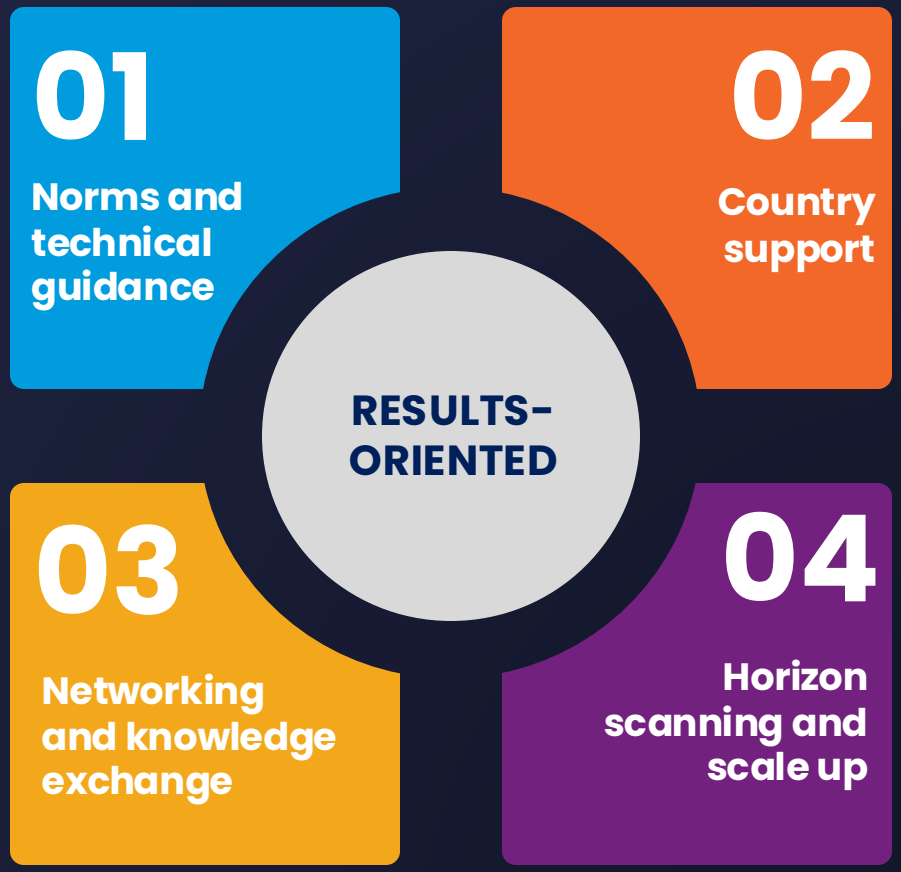
Regional digital health action plan for the WHO European Region 2023–2030

This draft regional digital health action plan for the WHO European Region 2023–2030 intends to support countries in leveraging and scaling up digital transformation for better health and in aligning digital technology investment decisions with their health system needs, while fully respecting the values of equity, solidarity and human rights.

The regional digital health action plan aims to contribute to (i) the achievement of the health-related Sustainable Development Goals, the WHO European Programme of Work, 2020–2025, and the WHO Thirteenth General Programme of Work, 2019–2025; and (ii) the operationalization of the WHO Global strategy on digital health 2020–2025.

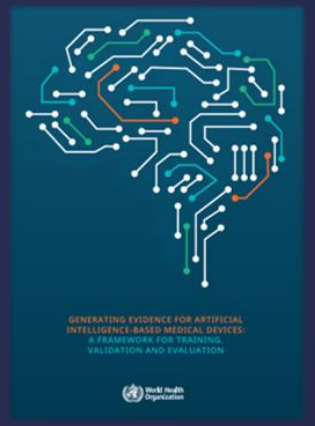
The regional digital health action plan identifies four strategic priorities for the achievement of this vision: (i) setting norms and developing technical guidance; (ii) enhancing country capacities to better govern digital transformation in the health sector and advance digital health literacy; (iii) building networks and promoting dialogue and knowledge exchange; and (iv) conducting horizon-scanning and landscape analysis for patient-centred solutions that can be scaled up.

The draft regional action plan is submitted to the 72nd session of the WHO Regional Committee for Europe together with a draft resolution in September 2022.



WHO Global guidance on AI for Health

- Ethics and Governance of AI for Health
- Guidance on Large Multi-Modal Models for Health
- Regulatory Considerations on AI for Health
- Benchmarking and evaluation framework



Cross thematic policy guidance

- Benefits And Risks Of using AI For Pharmaceutical Development And Delivery

Key activities

From **policy to practice**, we **connect the dots** across the entire AI for health governance landscape

01 Norms and technical guidance

02 Country support

RESULTS-ORIENTED

03 Networking and knowledge exchange

04 Horizon scanning and scale up

Thank you

For more information, please contact:

Data and Digital Health Unit
Division of Country Health Policies and Systems
World Health Organization, regional office for Europe

dosr@who.int
adibk@who.int

Relevant links:

- Regional digital health action plan for the WHO European Region 2023–2030
- Resolution “Leveraging digital transformation for better health in Europe”.

WHO Global guidance

It covers:

- Applications for AI for Health
  - Healthcare, R&D, healthcare management and public health examples
- Legal and regulatory landscape
  - Human rights , data protection, regulatory considerations (covered well in another document)
- Ethical principles (main topic –see below)
- Ethical challenges
- Building an ethical approach
- Liability regimes
- Elements of a framework for Governance for AI for Health

Ethical principles

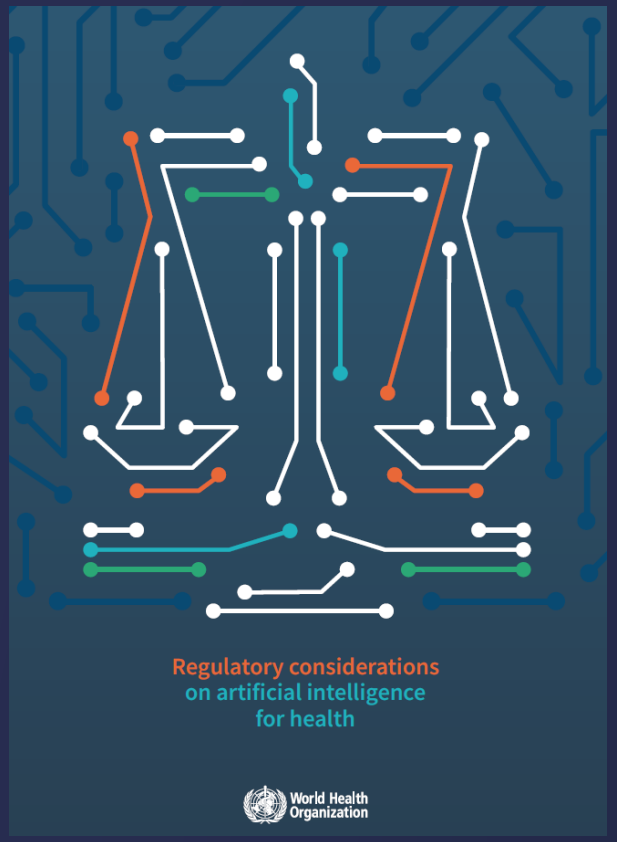
1. Human autonomy.
2. Human well-being, safety and public interest.
3. Transparency, explainability and intelligibility.
4. Responsibility and accountability.
5. Inclusiveness and equity.
6. AI that is responsive and sustainable.

WHO Global guidance

It covers: (minimum standards)

- **Software development**
  - Case examples
  - Farmwork for evaluation (usability, efficacy, effectiveness)
  - Intended use (risk classification, 8 minimum standards)
  - Model development and training for clinical evaluation
  - Clinical study designs for AI (EQUATOR, CONSORT AI, SPIRIT-AI)
  - Data management and model development (3 minimum standards)
- **Software validation and testing**
  - External validation (characteristics,5 minimum standards)
  - Data management (clean splitting , generalizability, augmentation, 4 minimum standards)
  - Evidence generation standards (list of regulatory guidance examples)
  - Evidence reporting (4 minimum standards)
- **Software deployment and post-market surveillance**
  - Evaluation of usability (5 minimum standards)
  - Evaluation of clinical impact (4 minimum standards)
  - Evidence on implementation (post marketing clinical follow up, 7 minimum standards)
  - Evidence on Procurement (e.g. NHSx Buyer's guide)

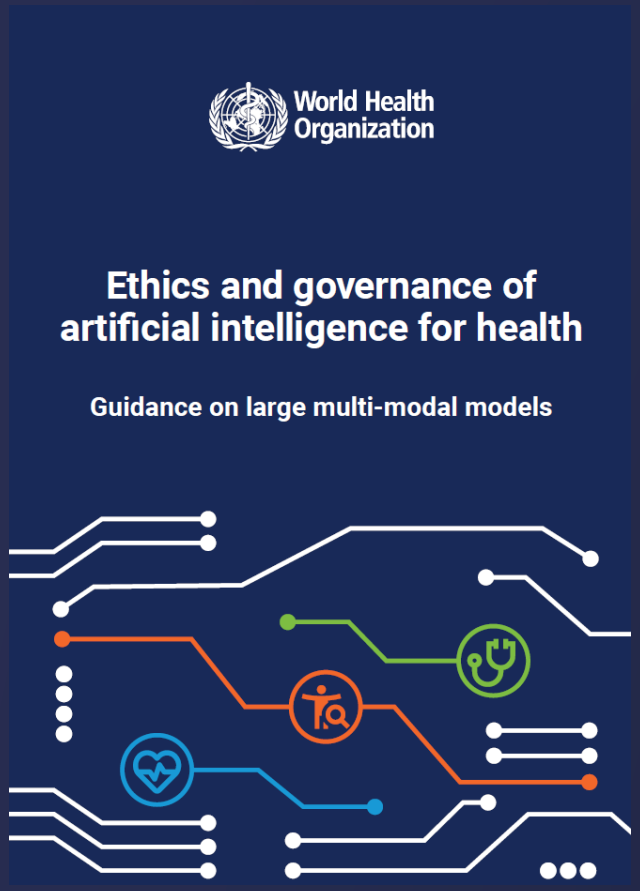
WHO Global guidance



It covers: (recommendations)

- Documentation and transparency (2)
- Risk management and AI system development life cycle approach (2)
- Intended use, analytical and clinical validation (4)
- Data quality (5)
- Privacy and data protection (3)
- Engagement and Collaboration (2)

WHO Global guidance



It covers:

- LMMs applications in health
  - Use, Benefits & Risks
- Wider risks and challenges
  - Health system, regulatory and societal
- AI (LMMs) value chain
- Risks to be addressed, how and by whom.
- Liability
- Global Governance

AI Governance

Elements:

- Strategies
- Legislation and regulations
- Agencies responsible for implementation and oversight
- Enforcement and liability

Dimensions

- Vertical vs horizontal
- Centralized vs decentralized
- Private vs public
- Hard (AI act, MDR) vs soft (WHO ethical principles)

Changes

- Expansion of rules
- Add on to existing rules
- Creation of new rules

AI-Powered Meteorology: How WMO Supports Countries with Forecasts for All

Dr. Matthieu Kohl
Associate Programme Officer - Regional Office Europe

2 September 2025

WORLD METEOROLOGICAL ORGANIZATION

Global AI Activities

AI is reshaping forecasting: *state-of-the-art global weather predictions* with far less computing power.

Challenges: NMHSs must keep pace and carefully integrate AI into operations

WMO's Role: Develop standards and foster collaboration for shared benefits

Opportunities:

- WMO develops AI pilot projects – e.g. Global Flood Prediction and Subseasonal Forecasting – supporting innovation and operational uptake of novel tools
- WMO helps to "democratize" access, enabling all countries to leapfrog to advanced forecasting.

DWD Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Latest press release

Important milestone in the use of artificial intelligence

Year of issue 2025
Date 06.08.2025

The Deutscher Wetterdienst establishes its new AI Centre for Weather and Climate

WORLD METEOROLOGICAL ORGANIZATION

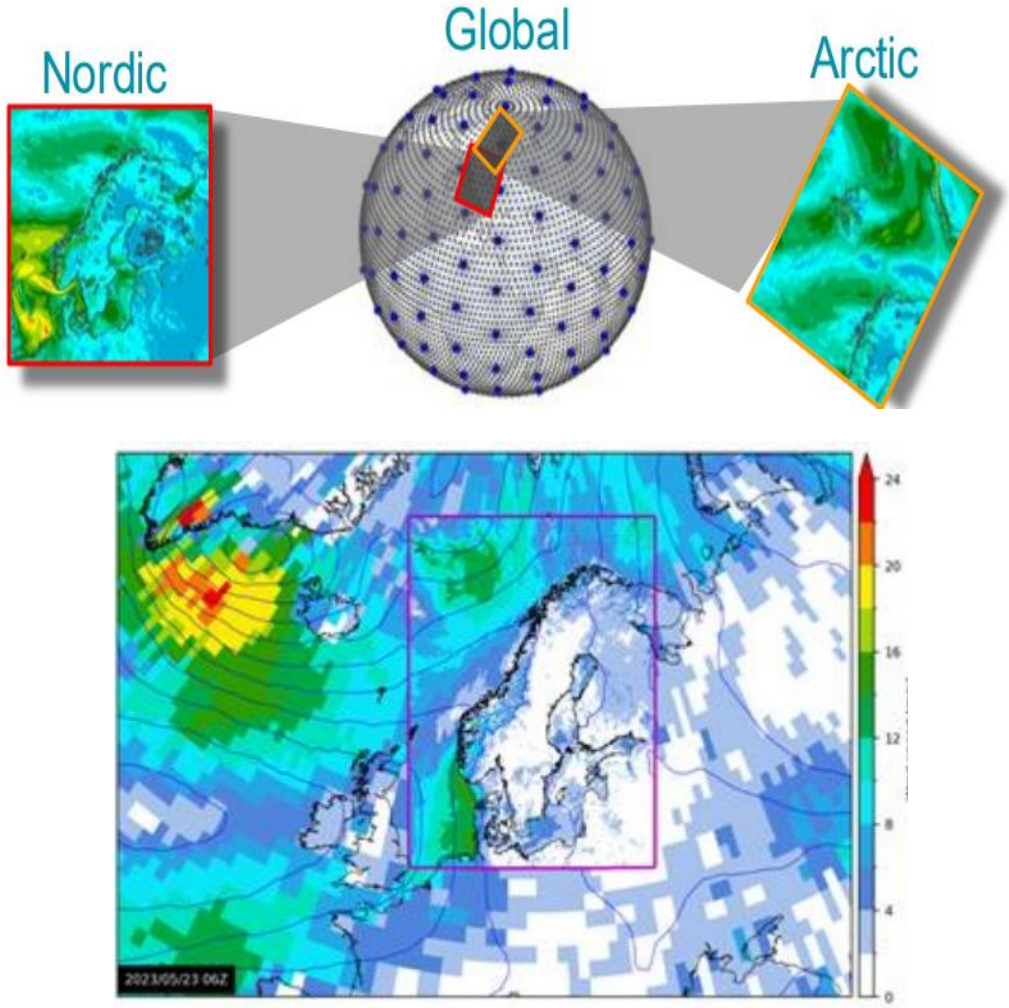
1950-2025 SCIENCE for ACTION

Regional AI Activities

Regional cooperation: WMO partners with European networks like **EUMETNET, ECMWF, and EUMETSAT** to co-develop and share AI-driven weather prediction tools.

Innovation in action: The *Anemoi* framework and Norway's Bris model explore AI-based short-range forecasting at high resolution (e.g. Arctic, Nordic regions).

Capacity sharing: Testing to move high resolution area to other countries both in Europe and in other regions.



Regional AI Based Weather Forecast – Image Credit MetNorway

Country Level AI Activity

“Forecast-in-a-Box”: A portable AI-powered weather forecasting system, developed by **MET Norway**, tested in **Malawi**, and being adapted for new pilots (including in Europe).

How it works: Packages the entire forecasting chain (data, models, visualization) into one tool that can run locally – even without supercomputers

Benefit for UNCTs: Countries without large infrastructure can still access advanced forecasting products.

Forecast in a Box – Image Credit: ECMWF

Thank you for your attention !

WORLD METEOROLOGICAL ORGANIZATION

1950-2025 SCIENCE for ACTION

Q&A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