The BDT AI Offering

offer to Member States across policy, infrastructure and skills

Telecommunication Development Bureau (BDT)

International Telecommunication Union

October 2026

BDT Role and Mandate

ITU Plenipotentiary Resolution 214 (BUCHAREST, 2022) on Artificial intelligence technologies and telecommunications/information and communication technologies

- *highlights* that ITU should continue activities related to AI in telecommunications/ICTs, including vital studies, information-sharing, and capacity building
- *instructs* the Directors of the three Bureaux, including BDT, to continue supporting their respective Sectors' work on AI technologies.



WTDC RESOLUTION 91 (BAKU, 2025) - Artificial intelligence technologies in telecommunication development

- *Resolves that the ITU Telecommunication Development Sector (ITU-D) shall develop activities that support Member States, particularly developing countries*
  - in building foundational telecommunication/ICT infrastructure as enablers for AI adoption;
  - to promote the exchange of knowledge and experience relating to opportunities and challenges of adopting AI tools and applications in telecommunications/ICTs;
- *instructs the Director of the Telecommunication Development Bureau*
  - to support Member States to assess their readiness, focusing on the expertise of the Telecommunication Development Bureau (BDT) in policy guidance, infrastructure development and capacity building;
  - to help Member States, focusing on telecommunication/ICT pillars that AI has an impact on, to identify strategic goals, facilitate enhanced AI adoption and enable the development of their national AI-related telecommunication/ICT infrastructure;
  - to facilitate information sharing among the ITU membership about ITU-D's work on AI in telecommunications/ICTs, in order to build understanding, particularly for developing countries, related to AI capacity building in support of telecommunications/ICTs and associated opportunities and challenges,

THE OFFER

Three pillars, one BDT AI offer

Policy

Policy and regulation

Help countries set the framework and institutions for AI

- Collaborative AI Framework and Preparedness Diagnostic
- AI policy and regulatory advisory
- G5 benchmark and ICT Regulatory Tracker
- GSR and the Digital Regulation Platform

Infrastructure

Infrastructure

Help countries build and use AI for public services

- GENIE.AI, open-source AI for digital public services
- DataHub and DataHub AI
- Broadband maps and connectivity planning tools

Skills

Skills

Build the people who design, regulate and use AI

- ITU Academy as the delivery platform
- Training for policymakers and regulators
- GENIE.AI training and hackathons

PILLAR 1 · POLICY

Policy: from diagnosis to a roadmap



1. Vision & Alignment

Strategic prioritization and assigned budgets for AI governance.

2. Institutional Governance

Mandates and formal coordination bodies across agencies.

3. Digital Infrastructure

4G/5G, secure cloud, and compute capacity including GPUs/HPC.

4. Data Ecosystems

DPAs, interoperability, and privacy-preserving data frameworks.

5. Talent & Skills

Internal technical expertise and academic partnerships within government.

6. Innovation & Procurement

Sandboxes and governance-driven public purchasing strategies.

7. Ethics & Trust

Impact assessments and public transparency mechanisms for accountability.

8. Enforcement

Explicit supervisory powers and corrective measures with legal teeth.

PILLAR 1 · POLICY

Sequencing Reforms: A Prioritized Action Roadmap for Governments

1 Phase 1 — Immediate (0–6 months)

Establish the Legal & Institutional Baseline

- Designate a lead AI coordination body with a clear mandate
- Audit existing legal frameworks for AI coverage gaps
- Launch a cross-agency working group with DPA, ICT, and sector regulators
- Publish a national AI governance roadmap with milestones

2 Phase 2 — Short-Term (6–18 months)

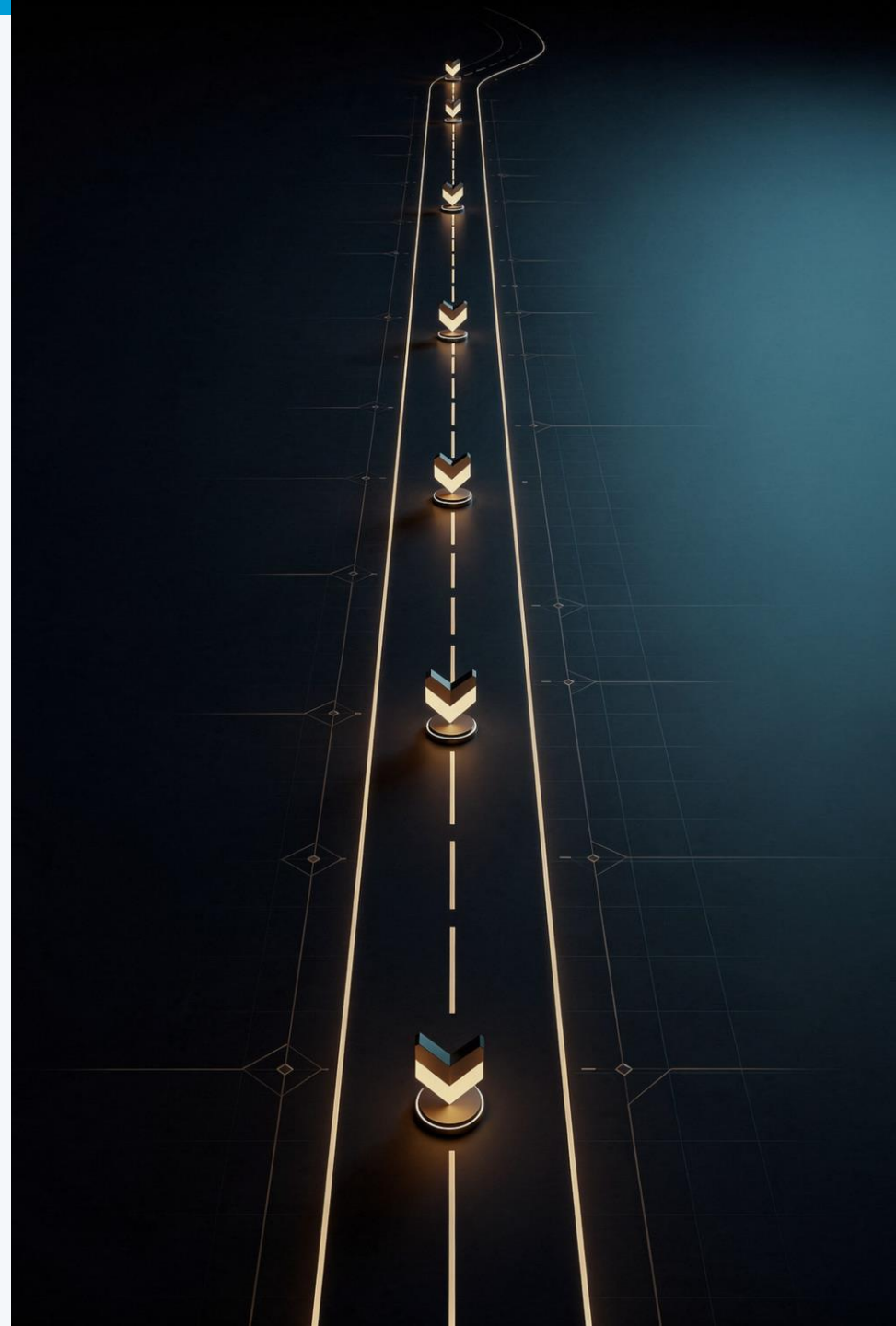
Build Operational Capacity

- Enact or amend data protection legislation to cover AI-specific risks
- Launch a public-sector AI skills program and secondment scheme
- Pilot a regulatory sandbox for high-risk AI use cases
- Develop standardized AI procurement clauses for government contracts

3 Phase 3 — Medium-Term (18–36 months)

Enforce, Scale & Internationalize

- Activate enforcement powers with trained supervisory staff
- Publish transparency reports on government AI deployments
- Engage in bilateral and multilateral AI governance dialogues
- Conduct the first full-cycle preparedness diagnostic reassessment



PILLAR 2 · INFRASTRUCTURE

GENIE.AI: AI for digital public services

An open-source AI framework that lets governments design, deploy and scale AI-enabled public services at low cost, without vendor lock-in and under local ownership.

Technology stack

- Open-source and commercial language models
- Retrieval over national documents
- Data ingestion from many sources
- Agents and workflows for real tasks
- Vision, speech and translation models

Typical cost per country

Package	Scope	Duration	Cost (USD)
Pilot or proof of concept	One use case, limited integration	3–8 weeks	35,000–60,000
Country MVP	Advisory, training, adaptation, working MVP, handover	2–3 months	about 100,000
Advanced MVP	Complex data, multilingual or multi-agency	3–6 months	125,000–150,000

Hosting: about USD 500–750 per month for one GPU node. Figures are GENIE.AI team estimates.

PILLAR 2 · TECHNICAL ASSISTANCE/INFRASTRUCTURE

Broadband mapping: where networks reach

Broadband Maps

GIS view of transmission networks such as optical fibre. Updated in 2025 with multi-layer analysis and a RAG chatbot.

Planning Platform (CPP)

Data-driven planning of broadband and last-mile networks for governments, regulators and operators.

Business planning toolkit

Economic evaluation of mobile and fibre deployment plans, including 5G network design.

Geodata and indicators

Geospatial catalogue, data dictionaries, 7 Broadband Capacity Transmission Indicators and Open Fibre Data.

Fibre proximity API

Returns how close a given location is to a transmission fibre node.

Member State validation

Data research framework, requests for information and end-of-validation letters before data is published.

For the AI offer, the maps show where data centres, compute and AI-enabled public services can be reached by fibre and mobile networks.

PILLAR 2 · TECHNICAL ASSISTANCE/INFRASTRUCTURE

Broadband mapping in practice

Africa-BB-Maps

EUR 15 million

Over four years, supported by the European Commission and announced at GSR-24, to set up national broadband mapping systems.

First 11 countries

Benin, Botswana, Burundi, Côte d'Ivoire, Ethiopia, Kenya, Malawi, Nigeria, Uganda, Zambia, Zimbabwe

Also: ITU and WATRA agreed in June 2024 to work together on ICT infrastructure mapping in West Africa.

Links to the AI offer

- Feeds GENIE.AI services: the Agrivisory Farm Connectivity Score uses the Broadband Map and CPP
- Supports backbone and siting analysis for AI infrastructure investment, with GS
- Uses AI itself: machine learning on satellite images to detect towers (proof of concept)

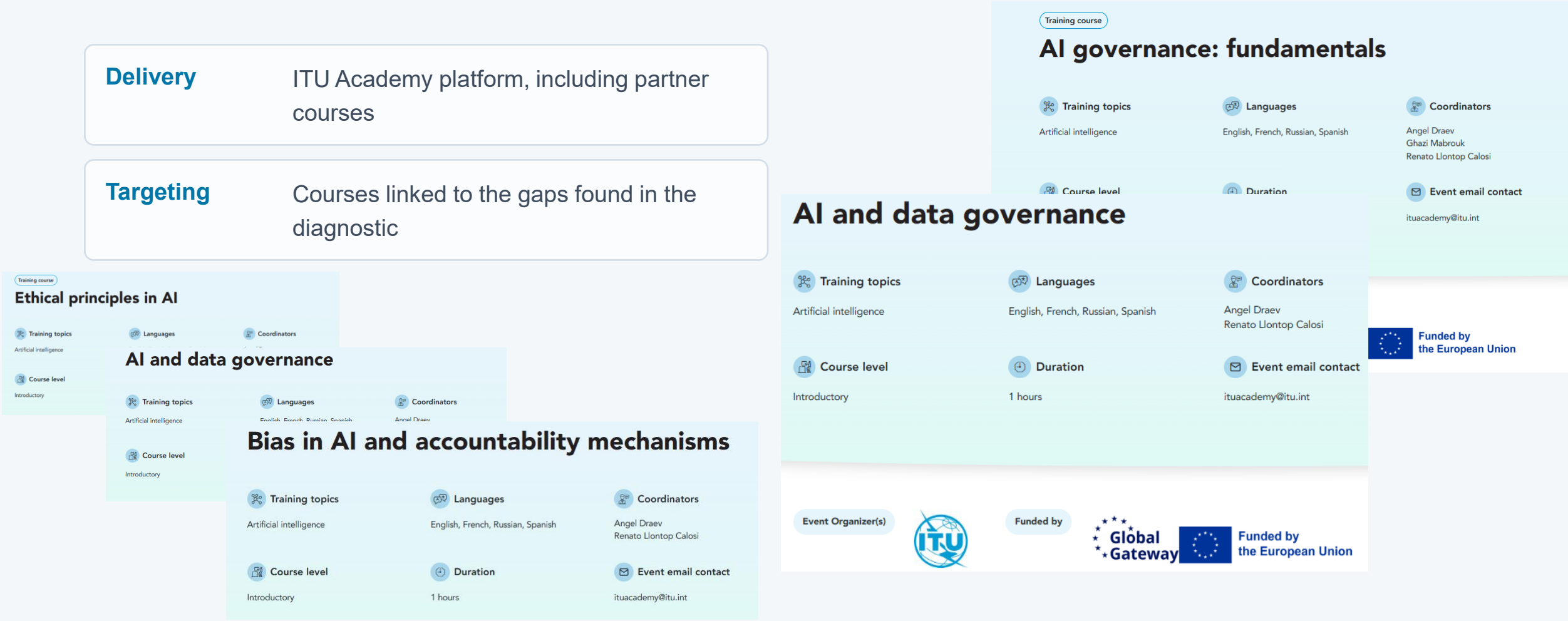
Training on the ITU Academy

- Introduction to Broadband Mapping (self-paced)
- Advanced Broadband Mapping
- Introduction to the ICT Infrastructure Business Planning Toolkit

PILLAR 3 · Skills

Skills: training that follows the assessment

Delivery	ITU Academy platform, including partner courses
Targeting	Courses linked to the gaps found in the diagnostic



Thank
You