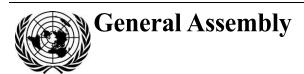
United Nations A/79/966



Distr.: General 2 July 2025

Original: English

Seventy-ninth session Item 123 Strengthening of the United Nations system

Innovative voluntary financing options for artificial intelligence capacity-building

Report of the Secretary-General*

Summary

The present report sets out innovative voluntary financing options for artificial intelligence capacity-building for consideration by the General Assembly at its seventy-ninth session, pursuant to the request contained in annex I to its resolution 79/1. The report provides an overview of the financing needs and supply for artificial intelligence capacity-building, alongside financing options and complementary measures that address emerging gaps in that regard and that are complementary to relevant United Nations funding mechanisms, taking into account the recommendations of the High-level Advisory Body on Artificial Intelligence on a Global Fund on AI.

^{*} The present report was submitted to the conference services for processing after the deadline for technical reasons beyond the control of the submitting office.





I. Introduction

- 1. Artificial intelligence (AI) is increasingly regarded as a general-purpose technology with vast and multisectoral potential for social and economic transformation. AI can enable the development of local and regional solutions to address pressing challenges, from precision agriculture to healthcare diagnostic tools and more effective applications in public administration. Countries with sufficient AI capabilities, when responsibly used, can foster productivity growth and create high-value jobs.
- 2. An AI divide looms, however. Many countries face resource and access constraints that limit their ability to design, build, deploy and use AI.² Without deliberate and targeted capacity-building, they risk becoming merely consumers of, or resource providers for, AI technologies designed elsewhere, thereby missing out on local technological and economic development. The absence of diverse perspectives in AI development also risks embedding existing biases and inequalities into the technologies that will shape our collective future.
- 3. In its final report published in September 2024, the High-level Advisory Body on Artificial Intelligence offered recommendations on the creation of a global fund for AI "to put a floor under the AI divide", with a focus on using financing to help to ensure that a minimum capacity can be created in countries in different regions to understand the potential of AI for sustainable development, adapt and build models for local needs and join international collaborative efforts on AI, while promoting habits of cooperation and common templates for interoperable governance. Despite numerous financing announcements in the past year, the advancement of these objectives remains uneven and is not guaranteed.
- 4. Through the present report, innovative voluntary financing options for AI capacity-building are submitted for consideration by the General Assembly at its seventy-ninth session, pursuant to the request contained in the Global Digital Compact (resolution 79/1, annex I). These financing options³ have been developed in consultation with potential contributors and the United Nations system, ⁴ and are complementary to relevant United Nations financing mechanisms, taking into account the Advisory Body's recommendations on a global fund for AI in both purpose and form. Innovative approaches to financing can offer additional sources of support amid fiscal constraints while also matching countries' AI capacity and financing needs at different stages of AI maturity.
- 5. Section II of the report contains an outline of the financing needs for AI capacity-building that arise from underlying gaps. Section III sets out an analysis of the supply of existing financing for AI capacity-building, including an assessment of gaps. Section IV contains proposals for innovative voluntary financing options for AI

¹ The opportunities, risks and challenges of artificial intelligence (AI) were analysed in the final report of the High-level Advisory Body on Artificial Intelligence, *Governing AI for Humanity* (United Nations publication, 2024).

² Human Development Report 2025: A Matter of Choice - People and Possibilities in the Age of AI (United Nations publication, 2025); Technology and Innovation Report 2025: Inclusive Artificial Intelligence for Development (United Nations publication, 2025).

³ Financing encompasses all types of financial resources including loans, guarantees, equity and grants. Funding, such as grants, refers specifically to non-repayable contributions and is a subset of financing. Given the variety of sources and recipients, this document uses "financing" to capture the full range of options.

⁴ See the online reference document on the overview of the consultation process, available at www.un.org/sites/un2.un.org/files/f71qzx.pdf.

capacity-building that seek to address such financing gaps along with complementary measures, with concluding observations in section V.

II. Financing needs for artificial intelligence capacity-building

6. Financing needs for AI capacity-building arise from underlying AI capacity needs and gaps. Two interdependent areas of AI capacity have been identified as key to unlocking local sustainable development that is aligned with human rights. The first area is AI foundations, including such core infrastructure as compute, data sets, AI models and digital literacy and AI skills across society. The second area is AI enablers, including coherent national AI strategies and international cooperation. These areas should be developed while taking into consideration Member State interests in technological autonomy and the imperative of digital cooperation.

A. Needs for foundational capacity in artificial intelligence

Compute capacity and associated energy and connectivity needs

- 7. AI development relies heavily on access to compute capacity to train, adapt and deploy AI models. The level of compute resources required can vary greatly, ranging from smaller-scale capacity needed for using or customizing existing models, to large-scale infrastructure necessary for the creation of new, advanced AI systems.
- 8. It is critical that countries establish a minimum compute infrastructure with data storage that is accessible to both the public and private sectors. Such an infrastructure would ensure that countries have reliable access to the basic tools required for AI development and use, including secure data storage, sufficient energy sources aligned with internationally agreed commitments on climate action, adequate computing power and stable Internet connectivity. These elements are essential for countries to engage meaningfully with AI technologies, experiment with those technologies and develop high-impact use cases.
- 9. Establishing a baseline infrastructure is not only important for supporting the design, deployment and use of AI models, but also for strengthening national autonomy, fostering local innovation and economic development and building long-term digital resilience alongside national AI strategies. That infrastructure equips governments and local stakeholders with the necessary tools to experiment with and adapt existing AI models in ways that are responsive to their unique economic and societal context.

High-quality, multilingual and domain-relevant data sets

- 10. Developing inclusive and effective AI models requires access to multilingual data sets that reflect the languages and needs of local communities. These data sets are crucial for building contextualized AI solutions that are equitable and impactful across diverse settings. Many countries face significant challenges in collecting, curating and maintaining such data, particularly for underrepresented and low-resource languages.
- 11. Creating and maintaining domain-relevant data sets that are applicable to such areas as agriculture, health or education is essential if AI models are to address development challenges. When data sets are fragmented, out of date and difficult to access, building an innovative digital economy becomes more challenging.
- 12. The above-mentioned issues can be addressed through proactive steps to build relevant data sets. An effective national data strategy can advance a regulatory

framework that promotes data flows and encourages interoperability between the public and private sectors. Such strategies should also protect the right to privacy, respect the rights of data owners and be designed with regional and global cooperation in mind. The development of digital public infrastructure can be an accelerator of sustained data flows and enable the development of large scale, high-quality national data sets.

Artificial intelligence models and use case repositories

13. Developing foundational AI models from the ground up can be costly and time-consuming, and the use of proprietary, off-the-shelf AI models often involves substantial licensing costs. In this context, open source and shared models can enable local innovators in low-resource settings to adapt and fine-tune existing systems rather than build entirely new ones, thereby conserving time and resources while accelerating innovation and local deployment. A regularly maintained global repository of AI use cases, including through the leveraging of existing repositories such as the AI for Good Neural Network and the Global AI Ethics and Governance Observatory of the United Nations Educational, Scientific and Cultural Organization (UNESCO), could offer practical and replicable examples of how AI can effectively address local and regional challenges, with a view to supporting knowledge exchange and informed adoption of AI technology.

Artificial intelligence development and deployment skills

- 14. AI systems rely on a skilled and diverse workforce. Developing, deploying and using AI effectively requires different types of expertise, including: AI design and development, which involves the building of new models; AI deployment, which is focused on adapting and fine-tuning existing models to solve specific problems; and AI adoption, which means the ability to apply AI tools in real-world settings. These efforts should be focused on both the public and private sectors in order to create a skilled workforce that is capable of driving inclusive, cross-sectoral AI innovation and implementation across the AI value-chain. Moreover, governments must invest in the upskilling and reskilling of their country's workforce, particularly for those whose jobs are affected by automation.
- 15. These needs could be addressed through training programmes for AI and data processing, and through coding boot camps, for example by offering them at local universities with well-crafted incentives for graduates to remain in country, or for experts among the diaspora to engage with capacity-building in their country of origin. AI adoption could be encouraged through broad secondary or tertiary programmes on the use of AI in the workplace and through public awareness initiatives. Given the rapid pace of technological progress, these skills need to be constantly updated and upgraded, which will require ongoing investment.

B. Needs for artificial intelligence enabler capacity

National artificial intelligence strategy

16. A well-articulated and modular strategy plays a critical role in creating an enabling environment for innovation, investment and sustainable growth, in line with national development priorities. It can provide clarity on regulatory frameworks, data governance, human rights and legal and ethical considerations, while guiding investments in digital public infrastructure. Strategies can also lead to the establishment of national AI institutes or centres of excellence and help to foster communities of practice. According to the index maintained by the Institute for Human-Centered Artificial Intelligence, 59 per cent of Member States did not have a

national AI strategy in place in 2024, with the figure rising to 84 per cent for the least developed countries. 5 Many countries with strategies have yet to formulate clear implementation plans, including at subnational levels.

- 17. Effective national AI strategies must be grounded in a comprehensive understanding of societal and economic needs, including for private sector innovation, which entails actively engaging with academia, civil society and businesses of all sizes, particularly small and medium-sized enterprises, so as to identify barriers and opportunities related to AI adoption. Sectoral dimensions must be incorporated from the outset. Strategies should include targeted assessments of key domains such as public services, agriculture, healthcare, education, energy, manufacturing and financial services, in order to identify in which aspects AI can deliver immediate and measurable benefits and which safeguards are required.
- 18. Targeted policy-related AI capacity-building can equip public leaders and institutions with the knowledge, skills and tools required to lead holistic national AI planning processes and govern AI responsibly. Such measures include strengthening policy and regulatory capabilities and enhancing officials' understanding of the human rights, ethical and societal implications of AI, thus enabling them to understand and navigate the key issues to be addressed.
- 19. There is growing demand for support in formulating national AI strategies, along with requests for support with the development of digital public infrastructure and start-up ecosystems for micro, small and medium-sized enterprises. Building such expertise within governments is critical to ensure that AI strategies are nationally owned, contextually grounded and aligned with long-term development priorities, thereby helping to guide key decisions on developing, deploying and using AI.

International cooperation

- 20. Given the global distribution of approaches to AI development, countries can readily build on experiences from early adopters at all levels. Such cooperation can include the sharing of resources and collaborating on the development of international data governance and interoperability frameworks.
- 21. International collaboration can also include the sharing of data sets, AI models, compute capacity and best practices for AI strategies. Such a collaborative approach can result in further alignment on governance, facilitate partnerships between countries and expand economic opportunities for local private sector actors.

C. Financing pathways for artificial intelligence capacity-building

22. Capacity-building efforts and their financing should be tailored to countries' differing levels of AI maturity. Five tiers of AI maturity are presented in box I, corresponding to differing AI capacity in the areas of compute supply, access to data, availability of a skilled workforce, levels of international collaboration, the existence of national AI strategies and the size of the digital economy. Given that expected returns on public and private capital will also tend to vary between tiers, appropriate financing options will often vary with countries' current level of AI maturity and strategic pathways for graduation to other tiers.

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⁵ Analysis of data from the Institute for Human-Centered Artificial Intelligence at Stanford University for its Artificial Intelligence Index Report (accessed June 2025).

Box I

Artificial intelligence maturity, by tier

Tier 0: "AI nascent"

At this stage, countries face deep structural and capacity constraints, which limit meaningful AI engagement. Most lack a national AI strategy, or where it exists, there is no clear implementation plan. Expertise is minimal across government and the private sector. Infrastructure is weak, with unreliable connectivity, limited compute power and unstable energy. Structured data sets are scarce and data governance frameworks are largely absent. Education and training in AI are very limited, and both domestic investment and access to international financing are low. Engagement and support from existing private sector actors towards AI capacity development in these countries is extremely low to non-existent.

Strategic pathway to tier 1

A key step towards tier 1 is developing a minimum irreducible capacity across four domains: computing, data, skills and the ability to reuse pre-trained models. This step requires a national AI or digital strategy with a phased road map, backed by institutional coordination. Another essential step is establishing a national AI centre to support collaboration, oversee the management of shared resources, assess sectoral needs and lead training efforts, as well as engage effectively on international AI norms and standards, including international human rights law. Broad-based digital literacy and workforce skills development programmes, along with international support, are essential to building this foundation.

Strategic pathway to tier 2

To reach tier 2, countries need to expand compute capacity and improve the implementation of AI strategies. This step includes identifying priority sectors and developing high-impact use cases to demonstrate value and build confidence. AI centres may grow into hubs focused on such critical sectors as mining, manufacturing, agriculture and health, and are formalized within universities or

Tier 1: "AI experimenters"

These countries have begun integrating AIinto national development. A national strategy is often in place, with basic compute infrastructure located in universities government institutions. Early AI applications are being piloted in such sectors as health, education and agriculture. A small but growing pool of AI professionals are supported by academic or international partnerships. Regulatory frameworks are though emerging, are often fragmented. Countries are able to participate effectively in international dialogues on ΑI governance. Engagement support from existing private sector actors towards AI capacity development in these countries is low.

Tier 2: "AI ready"

is being adopted more systematically. These countries have mid-scale compute resources, such as national data centres or high-performance clusters, and growing private sector activity. Multilevel national AI strategies are being actively implemented, with better central government policy coordination. Universities offer stronger programmes and start-ups are

public institutions to lead applied research and accelerate private sector collaboration. Governance progressively frameworks incorporate ethical and human rights foundations. Broader skills development in the sectoral application of AI and stronger data governance are also key components of this transition.

r 3 Tier 3: "AI-enabled"

Countries at this tier have built a strong foundation and deploy AI widely across public and private sectors. AI supports productivity, innovation and service delivery. Compute infrastructure includes national platforms and access to advanced cloud systems. The energy and connectivity environment are stable. A skilled workforce, strong universities and private sector engagement support the ecosystem. AI is used in such specific sectors as agriculture, transportation, health, manufacturing and public services. Data governance systems are operational and interoperable cross-sectoral and support integration.

emerging. Structured national data

sets and governance frameworks

are being developed, though

consistency varies across sectors.

Strategic pathway to tier 3

To advance to tier 3, countries need to scale up compute and data infrastructure and integrate AI into broader economic planning. National strategies are regularly updated. Governments develop scalable, sectoral AI use cases and ensure that AI hubs support public-private research international collaboration. Legal frameworks governance address challenges to human rights, such as discrimination, information privacy, and communications technology security, and accountability and access to effective remedies. A crucial aspect is start-up and scaleup funding for entrepreneurs, as well as growing integration across AI innovation and the broader digital economy. Specific attention is given to sectoral AI development.

Strategic pathway to tier 4

To reach the frontier (tier 4), countries need to build capacity to train large models and invest in local infrastructure, advanced hardware and frontier research. Specific skills development for foundational models and frontier applications is needed. Strategies anticipate and address emerging technology issues. Legal frameworks evolve to manage existing and emerging risks and promote responsible innovation, respecting human rights. Countries are active in developing

Tier 4: "AI developers"

These countries are global leaders in AI. They develop foundation models, contribute to cutting-edge research and maintain significant domestic compute capacity. AI is embedded in all major sectors and national policy. Talent is supported by world-class institutions and global partnerships. Data ecosystems are advanced, with real-time, systems interoperable and adaptive governance.

While they may not need foundational support, global

international AI standards and have broad collaborations with international partners to secure opportunities and participate in global value chains. cooperation remains critical to their success. Access to diverse data sets, use cases and interoperable international markets is essential for continued innovation. These countries can drive further progress through open research and cross-border partnerships.

- 23. Countries have several paths to increase their AI capacity. Countries at tier 0 and tier 1 typically lack robust digital infrastructure, and the risk-adjusted rates of return on capital are often too low to attract adequate private investment. For these countries, a minimal local compute capacity supplemented by cloud-based solutions, financed by domestic revenue or philanthropic capital or aid, may be the most viable initial pathway to increasing AI capacity. These approaches require lower upfront investment, making them suitable for countries in which financial returns are unlikely and the focus is on establishing a core minimum of AI capacity.
- 24. As countries advance through the tiers, their financing needs, digital economies and AI maturity evolve, allowing them to pursue more ambitious pathways. Development financing becomes more viable and early interest from patient capital may begin to emerge, all of which creates opportunities for blended models that combine philanthropic, development bank and public-private partnership financing. Countries may transition towards in-country compute infrastructure, thereby increasing autonomy and sustainability. These countries may experiment with more localized AI solutions as part of developing the talent and infrastructure necessary for mid-level model creation.
- 25. By tier 4, countries have established digital economies and the capacity to train large foundation models, often relying on private sector equity and debt financing for further growth. At this tier, countries can directly adopt advanced AI solutions and contribute to the global AI ecosystem, provided they have addressed foundational challenges such as infrastructure, talent and governance. The choice of pathway is directly influenced by a country's current development level, resource availability and long-term vision for harnessing AI.⁶

Minimum irreducible artificial intelligence capacity for tier 0 countries

- 26. A minimum irreducible AI capacity has been identified as essential for enabling any country to begin its AI development journey, consistent with the goal of "putting a floor under the AI divide". This core capacity is best defined as a minimum level of skills, compute, data and models, as well as a national AI strategy and international collaboration, reinforced by baseline policy and the technical conditions needed to support impactful and safe experimentation with AI. Although the size and configuration of this capacity may vary across countries depending on factors such as population, GDP, specific needs and political commitment, it is envisaged to be of similar scale across contexts and not expected to vary significantly in the initial stages.
- 27. Establishing this minimum AI capacity empowers countries in tier 0 in several ways. First, it enables them to prototype and pilot AI use cases in the public sector and to spur the emergence of a budding private sector. Second, it supports informed

⁶ See the online reference document on strategic pathways for AI capacity-building, available at www.un.org/sites/un2.un.org/files/k8m2ra.pdf.

policymaking by equipping legislators, regulators and officials with the knowledge required to develop effective laws, regulations and soft norms, such as risk and human rights-based guidelines for industry. Third, it strengthens national capacity for the development of context-related and high-quality data sets. Fourth, it helps to cultivate domestic talent and build innovative ecosystems by supporting universities, start-ups and research institutions, thereby creating high-skilled employment opportunities and limiting brain drain. Finally, it enables countries and other stakeholders to participate meaningfully in international discussions on AI governance, standards and future developments. With a foundational level of technical capability, all countries and other stakeholders can engage effectively in the development of international AI norms and standards.

- 28. Within the United Nations system, multiple agencies have launched promising initiatives across diverse areas, including on global, regional and in-country AI assessments and skills development, national AI ethics, assessments, strategies and AI policy and strategy support, and efforts to bridge standardization gaps at the national and regional levels, including the AI Landscape Assessment and AI Readiness Assessment launched by the United Nations Development Programme, the AI Skills Coalition established by the International Telecommunication Union and the Programme on AI for the Public Sector developed by UNESCO. Such initiatives would benefit from increased and sustained financing and coordination in order to achieve greater scale and impact.⁷
- 29. Ensuring close cross-sectoral collaboration is essential in order to maximize synergies, enable the development of coherent, whole-of-government national AI strategies and ensure a minimum irreducible capacity in tier 0 countries that is employed in the ways best suited to each country's specific context.

III. Supply of existing financing for artificial intelligence capacity-building

- 30. Several regional and national AI capacity-building financing initiatives have recently been announced by individual Member States, groups of Member States, coalitions between countries and philanthropic organizations, and the private sector. In early 2025 alone, the Global AI Summit on Africa resolved to establish a \$60 billion fund to build robust AI ecosystems across the continent, 8 while the European Union launched 200 billion euros of investment in AI and related initiatives. 9 Multilateral development banks and Member States are also already funding certain AI capacity-building projects and initiatives, such as Artificial Intelligence for Development, including in partnership with private sector investors in certain cases.
- 31. While these funding announcements hold promise, many aspects remain preliminary. In several cases, announcements have been made without a clear identification of funding sources. Moreover, a significant proportion of existing funds are nationally or subregionally focused, which raises concerns about uneven coverage and the risk that some Member States will be left behind. For example, even if the fund established by the Global AI Summit on Africa could cover all 54 African

⁷ For a full review of United Nations system capacity-building activity on AI, see the overview of United Nations system AI capacity-building activities in the civilian domain, available at https://www.un.org/sites/un2.un.org/files/n3pvlw.pdf.

⁸ See the Africa Declaration on Artificial Intelligence, available at https://c4ir.rw/global-ai-summit-on-africa.

⁹ See https://digital-strategy.ec.europa.eu/en/news/eu-launches-investai-initiative-mobilise-eu200-billion-investment-artificial-intelligence.

countries, 48 vulnerable States in other regions (10 least developed countries and 38 others)¹⁰ would still not necessarily be covered by recent international, regional and philanthropic funding announcements for AI capacity-building.¹¹

- 32. In September 2024, the High-level Advisory Body on AI considered that "there are no existing global funds for AI capacity-building with the scale and mandate to fund the significant investment required to put a floor under the AI divide". The Advisory Body noted that existing funding mechanisms within the United Nations system, such as the Joint Sustainable Development Goals Fund under its digital transformation window, face challenges in scaling revenue from the private sector and other alternative sources, have limited expertise and specialization in AI and do not always disburse funding beyond United Nations entities to directly support national governments or other non-United Nations entities.
- 33. As AI capacity-building announcements proliferate, there are also risks: duplication of administration and expertise; competition between funds; strategic misalignment with needs; and a lack of a shared understanding of which measures effectively close AI capacity gaps. In addition, an abundance of AI pilots and proofs of concept without effective and coordinated scaling mechanisms can impede momentum and impact.

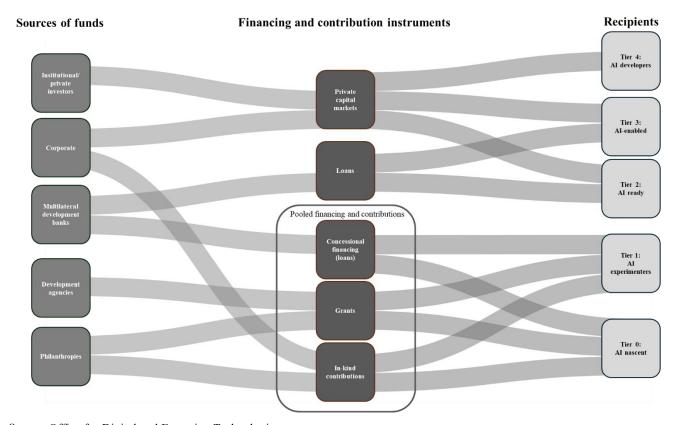
IV. Financing options and complementary measures for artificial intelligence capacity-building

34. The landscape of financing options for AI capacity-building available to countries is constrained by the available returns on capital invested at different stages of AI maturity, as described in paragraphs 23 to 25 above. The simplified overview of financing instruments illustrated in the figure below shows how different kinds of financing instruments generate impact across tiers of AI maturity. Of note, it is extremely challenging for countries in tier 0 and tier 1 to access funding and loans from private investors.

From the sustainable development perspective, there are 92 Member States in the category of vulnerable countries, across the three categories of least developed countries, landlocked developing countries and small island developing States. See https://www.un.org/ohrlls/content/about-us.

¹¹ See the online reference document on the overview of AI capacity-building financing announcements 2020–2025, available at https://www.un.org/sites/un2.un.org/files/t4uxmb.pdf.

Overview of financing instruments



Source: Office for Digital and Emerging Technologies.

Abbreviation: AI, artificial intelligence.

35. Just as a minimum irreducible capacity is needed at the national level to harness the opportunities of AI and mitigate the risks, a minimum level of international support to national efforts is required to "put a floor under the AI divide" globally. This global irreducible capacity could comprise a fund that pools contributions from government and philanthropic donors (and other innovative sources outlined in paras. 42–47 and 50) to invest in tier 0 countries (and tier 1, as appropriate), where the need is most acute and where market-based solutions are least likely to emerge organically. Any new fund would be complementary to relevant United Nations funding mechanisms, including existing pooled funds such as the Joint Sustainable Development Goals Fund.

36. For all countries, including those at tiers 2 and 3, this global response could also incorporate a coordination platform for funders to align their efforts, share information and develop common impact assessments, and a mechanism for channelling in-kind contributions, technical advice, talent development, data pooling and proven AI solutions. The three components of the minimum irreducible global response are detailed below, including innovative voluntary financing options for fundraising and disbursement.

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A. Global Fund for AI with innovative voluntary financing options for artificial intelligence capacity-building

- 37. With sufficient capitalization, a Global Fund for AI would help ensure that all countries secure an minimum irreducible AI capacity across skills, compute, data and models, alongside the establishment of a national AI strategy and engagement with international collaboration. A pooled financing mechanism, drawing from the best practices of multi-partner trust funds that have proven effective in international development contexts, would aggregate voluntary contributions from multiple sources, enabling the coordinated deployment of resources, while reducing administrative overhead and transaction costs.
- 38. The Fund could be administered by a relevant administrative agent with operational decisions guided by a steering committee comprised of donors, relevant United Nations system entities and other stakeholders, including representatives of beneficiaries. Investment decisions would be subject to independent technical assessment panels, which account for cross-sector and sector-specific considerations, and a multistakeholder advisory group to enable smaller donors and civil society to give their input, without undue preponderance of commercial interests. Contributions and decisions should be made publicly visible. The Fund could be created for rapid disbursement and time-limited, with a clear set of goals and benchmarks, and include an exit strategy to be followed once those goals had been achieved.
- 39. The Fund would abide by the agreed principles of capacity-building, ¹² in particular that all activities and initiatives would be conducted in an evidence-based, accountable and transparent manner, based on national ownership. In addition to the agreed principles, the following guiding considerations would be prioritized:
- (a) Needs-based and demand driven, with initial focus given to countries at tier 0 (AI nascent) and tier 1 (AI experimenters), as appropriate, which are likely to be mostly least developed countries, landlocked developing countries and small island developing States;
- (b) Practical, results-oriented, specific and scalable projects intended to develop the minimum irreducible AI capacity for the AI nascent tier, supporting the purposes outlined in paragraphs 26 to 28 above.
- 40. Such a Fund, with an initial commitment in the range of \$1 billion to \$3 billion, could support a cohort of countries on the strategic pathway to advance from tier 0 to tier 1 over a period of two to four years, thereby improving their eligibility for development financing and catalysing demand for new infrastructure as countries mature towards tier 2, as well as supporting some to advance towards tier 2, as appropriate. The Fund would enable concrete outcomes in key sectors aligned with national development priorities.
- 41. Voluntary contributions from governments and philanthropies would form the backbone of this approach, providing core funding based on their capacity to contribute. Multilateral development banks represent important partners, given their expertise in technology infrastructure financing and their existing relationships with recipient countries. The private sector is also a potential source of investment and expertise on market demand. Traditional grant-making by disbursing funds based on proposals that outline specific goals, activities and budgets would provide predictability and stability for recipients, allowing for long-term planning for tier 0 countries where other sources of financing may be less forthcoming.

¹² See https://unsdg.un.org/resources/capacity-development-undaf-companion-guidance.

- 42. The monitoring and evaluation of all funded activities would be done in accordance with relevant methodologies and procedures. It is recommended that a consolidated public report be produced on an annual basis to summarize the impact and results of funded activities, assessing changes in AI capability and usage and analysing the effects of those changes on development outcomes, alongside real-time independent evaluations and open data-sharing. Financial reporting would be done in the aggregate, indicating overall spending by the Fund.
- 43. In the context of fiscal pressures and the need to cater to the specific demands of AI capacity-building, innovative voluntary financing options for the capitalization of the Fund and for the disbursement of financing could increase funding and drive impact.

Innovative voluntary financing options for capitalization of a Global Fund for AI

- 44. A voluntary digital infrastructure transaction contribution could be offered by a consortium of major technology platforms, with a minimal percentage (e.g. 0.01-0.05%) of the value of relevant technology transactions donated by the members of the consortium to the Fund. Given the massive scale of the global digital economy, even fractional percentages could generate substantial resources while remaining virtually imperceptible to customers or shareholders. Though envisaged as donation-based rather than taxation-based, the scale and impact of such innovative voluntary financing options could draw inspiration from the experience of the telecommunications sector with universal service funds to supplement domestic resources at the national level, or from the successful airline ticket charge implemented by Unitaid, which has generated over \$2.5 billion since 2006 for global health initiatives internationally.
- 45. Voluntary digital asset contributions could flow from the growing digital asset ecosystem, with small voluntary transaction contributions from major digital asset exchanges or blockchain-based services, in line with established multilateral fiduciary governance and transparency safeguards for comprehensive risk management. This approach could be particularly appropriate given the computational intensity of many blockchain operations and their relationship to AI development infrastructure.
- 46. Co-financing arrangements between the Global Fund for AI and multilateral development banks could draw in additional financing through development loans, thereby creating additional leverage to augment pooled contributions with the benefit of the United Nations system's deep in-country presence and experience in the least developed countries.

Innovative voluntary financing options for disbursement by a Global Fund for AI

47. Performance-based grant-making ties disbursements to the achievement of predefined outcomes. This approach aims to enhance accountability and ensure that funding drives measurable progress. It encourages efficiency and innovation by rewarding results rather than activities alone (see box II).

Box II

Case study of the Global Fund to Fight AIDS, Tuberculosis and Malaria

The Global Fund to Fight AIDS, Tuberculosis and Malaria employs a distinctive financing approach built around performance-based funding and country ownership. Since 2002, it has disbursed more than \$65 billion, working in over 100 countries, and has developed a funding model that incorporates several innovative features:

- Performance-based financing: funding disbursements are tied to the achievement of predefined targets and the proper use of funds, thereby creating accountability.
- Country-led implementation: programmes are designed and implemented by national stakeholders through country coordinating mechanisms.
- Multi-stakeholder governance: the Board includes representatives from donor and implementer governments, non-governmental organizations, the private sector, foundations and affected communities.
- Independent technical oversight: proposals are evaluated by a Technical Review Panel of independent health, development and finance experts.
- Transparency and accountability: robust oversight through on-theground monitoring and an independent Office of the Inspector General.

Applicability to artificial intelligence capacity-building

The Global Fund model could be applied to AI development funding by ensuring performance-based disbursements tied to achieving specific AI capacity milestones. Key adaptations would include:

- Country coordinating mechanisms to develop national AI capacity-building plans in partnership with national authorities.
- Disbursements tied to the achievement of predefined milestones.
- Grant governance through a multi-stakeholder board with balanced representation.
- Independent technical review panel with AI expertise to evaluate proposals.
- Transparent performance metrics for AI capacity development.

This approach would be particularly suitable for developing comprehensive national AI strategies and implementation plans and for building institutional capacity.

B. Additional innovative voluntary financing options for artificial intelligence capacity-building

- 48. A review of a broad range of potential models that could be adapted from other sectors to drive AI capacity development has been conducted. Further details are provided in supplementary information that is available online.¹³
- 49. AI development bonds could be issued to raise upfront capital while spreading the outlays of donor entities over a longer duration. Such bonds could help to finance the development of comprehensive longer term national AI strategies, implementation plans and institutional capacity-building, by incentivizing countries to set ambitious but achievable goals and develop effective governance frameworks for AI (see box III). The proceeds from the sale of bonds could be transferred to the Global Fund for AI for disbursement according to the relevant criteria and governance, or through a separate institutional vehicle dedicated to rapidly scaling up AI capacity.

Box III

Case study of Gavi Alliance vaccine bonds

The International Finance Facility for Immunization model is built upon partnerships between donor countries, private investors, the World Bank and the Gavi Alliance. The mechanism works as follows:

- Donor countries make legally binding pledges spanning 10–20 years
- The World Bank, as treasury manager, converts these pledges into vaccine bonds
- Bonds are sold to a diverse range of investors on capital markets
- Proceeds are immediately transferred to the Gavi Alliance for immunization programmes
- As donor payments are received over time, they are used to repay bondholders

Vaccine bonds have enabled the Gavi Alliance to frontload its spending: by issuing bonds against future donor pledges, the International Finance Facility for Immunization nearly doubled the Alliance's funding in its first five years, which enabled the rapid scaling up of the programme during its critical early implementation years.

Applicability to artificial intelligence capacity-building

Although vaccine investment objectives are set over a much shorter time horizon, the International Finance Facility for Immunization model could be adapted to create AI development bonds that would frontload investments in AI infrastructure and capacity-building in low- and middle-income countries, using a similar process as outlined above and with a much longer horizon.

¹³ See the case studies of existing innovative financing mechanisms and how they could be adapted for AI capacity-building in low- and middle-income countries, available at https://www.un.org/sites/un2.un.org/files/z5jekq.pdf.

That approach would be particularly suitable for financing large-scale AI infrastructure investments such as data centres, which require substantial upfront capital but provide long-term benefits. It could also fund comprehensive national or regional AI capacity-building programmes that need immediate, substantial resources to achieve critical mass and become self-sustaining, in line with national development priorities.

- 50. Conditional debt forgiveness could transform existing debt obligations into AI capacity-building commitments, providing immediate fiscal relief to beneficiary countries while ensuring that resources are directed towards strategic development priorities. Creditor countries could offer partial or complete debt cancellation in exchange for equivalent investments in AI infrastructure, skills development and institutional capacity. ¹⁴ Multilateral debt restructuring could involve coordination among multiple creditors to provide comprehensive debt relief packages tied to AI capacity-building commitments, thereby maximizing the impact while ensuring sustainable debt levels for recipient countries and promoting nationally agreed development priorities, objectives and strategies. Such "debt-for-AI capacity swaps" would need to be accompanied by adequate risk mitigation measures, such as alignment with established multilateral fiduciary frameworks, in order to ensure sustainability and avoid adverse outcomes.
- 51. Catalytic, blended public-private co-financing of local companies focused on AI development, deployment or use in beneficiary countries could apply grant funding and local context knowledge to de-risk private sector co-investment and build local AI capacity in the form of revenue-generating businesses, along the lines of the Innovation Bridge initiative of the World Food Programme and the United Nations Capital Development Fund. Performing local bank loans for financing AI capacity-building projects in developing countries could be securitized by multilateral funding entities, in return for commitments from local banks to originate further such projects, thereby enabling virtuous cycles of private sector financing. Such options are constrained by the availability of returns and are likely to become viable only after countries have already secured a minimum irreducible AI capacity.
- 52. Several of the proposed tools, including grants, co-financing and performance-based financing, are already in use by multilateral development banks and other organizations and could be scaled or repurposed for AI capacity-building.

C. Options for coordination of financing and in-kind contributions

Coordination platform

- 53. Regardless of the scale of any Global Fund for AI, there would likely still be a range of AI capacity-building financing that occurs beyond that framework, and those endeavours may benefit from global coordination. There is evidence of the usefulness of such a platform, for example in the climate and health contexts, and interest among funders of AI capacity-building for a similar framework is growing.
- 54. Amid proliferating financing initiatives for AI capacity-building globally, and taking into account recent challenges associated with fragmentation across green and climate funds, such a platform could draw together funders and existing initiatives so

¹⁴ The mechanism could be structured with specific performance milestones, ensuring that debt relief translates into measurable AI capacity improvements. This might include establishing minimum compute infrastructure, training specified numbers of AI professionals or developing national AI strategies within defined time frames.

as to enhance dialogue among them, improve strategic alignment, enhance operational coordination and identify financing gaps and investment opportunities, thereby contributing to more efficient and effective financing engagement outcomes, alongside portfolio-wide learning and the scaling up of best practices for maximal impact.

- 55. The platform would not directly finance AI initiatives. Existing funders would retain responsibility for allocating funds and resources in line with their independent decisions. The value added from the platform would arise from:
 - Enhanced strategic alignment. Funders would benefit from agreeing to a common set of goals for AI development, as well as clarity as to how initiatives complement each other and on the distribution of projects between organizations. The platform could develop a charter of common principles for AI financing, the sequencing of projects and the remits of the major stakeholders so as to provide strategic direction for actors in this space.
 - Working level coordination. Funders need to ensure that projects are not duplicative. The platform could create a quarterly forum for major donors to share their upcoming investment commitments and to align their efforts, alongside creating informal communication channels to encourage dialogue on emerging issues. Moreover, by facilitating collaboration and dialogue among funders, the platform could help to reduce redundancy in financing efforts across different initiatives. It would play a critical role in identifying joint financing opportunities, encouraging the mutualization of resources and fostering shared investments in key areas of AI capacity-building.
 - Identifying investment opportunities. Funders need a well-curated portfolio of impactful and scalable projects that are ready for investment or support at the subnational or national level. The platform, in collaboration with interested Member States, could conduct horizon scanning and network-building in order to identify and share a selection of projects for review by investors and funders, or create an open access platform to match AI for development projects with potential funders. The platform could assist Member States in identifying and articulating their needs and could identify joint financing opportunities that would be of benefit to groups of Member States tackling similar problems. The platform could also identify and facilitate co-financing opportunities for large-scale projects that exceed the capacity of individual funders, while ensuring that all initiatives drive sustainable development.
 - Effective fund allocation and monitoring and evaluation. Funders need clear monitoring and evaluation indicators that can demonstrate evidence of project impact, which is especially important in the context of constrained resources. The platform could help to build standardized monitoring and implementation processes and metrics to be used across multiple funders and projects. The platform could also act as an impartial space to undertake periodic and/or final monitoring and evaluation. The platform could publish an annual report on the state of AI capacity-building, with case studies, insights and lessons learned from across the ecosystem, and/or create a shared assessment hub that assesses potential projects and offers advice on their likely effectiveness, including through real-time independent evaluation and the use of open data.

Coordination of in-kind contributions

56. In its recommendations on a Global Fund for AI, the High-level Advisory Body on AI also proposed that in-kind contributions be pooled from public and private sector entities and distributed so as to catalyse local empowerment for sustainable

development, including through a capacity development network. While financial assistance remains critical, in-kind support, such as expertise, access to infrastructure and knowledge transfer, can play an important role in strengthening local capabilities (see examples in box IV).

Box IV

Case studies of the value of non-financial support

Capacity-building through knowledge transfer: German Agency for International Cooperation policymaker training. The capacity-building programme of the German Agency for International Cooperation uses a 5-module curriculum to equip officials with AI governance skills. Through scenario-based learning and country-specific case studies, participants develop regulatory sandbox frameworks, algorithmic impact assessment tools and public procurement guidelines for AI systems. Over 87 per cent of graduates have implemented national AI strategies within 18 months, demonstrating the effectiveness of non-monetary technical assistance.

Data-sharing frameworks: UK Biobank open science model. The biomedical database provides curated health data sets to 30,000 researchers worldwide, enabling discoveries in personalized medicine while maintaining strict privacy protocols.

Institutional strengthening: Possible telemedicine network, Nepal. In the remote regions of Nepal, Possible built healthcare capacity through technology transfers rather than direct funding by training community health workers in AI-assisted diagnostics, implementing open-source electronic health records and establishing telehealth hubs with donated equipment.

Skill development: AI Skills Coalition of the International Telecommunication Union. The Coalition is an open platform for delivering AI skills, knowledge and expertise. The Coalition includes 50 partners from the United Nations system, academia, governments and industry, providing accessible learning and training resources on AI literacy for the general public at all levels.

- 57. The facilitation of matching in-kind contributions with gaps could take the form of strategic partnerships, where companies provide services at cost or below market rates in exchange for access to emerging markets and talent pools, brokered through a matching mechanism. This could include compute credits or AI skills education programmes, which would be matched to countries able to benefit from such assistance. Resources would be made available at the request of the receiving parties, in line with the aims of recipient countries' national AI strategies and shared normative commitments, and could also include:
 - AI skills development programmes and collective core curriculum development, building on such existing efforts as the global AI Skills Coalition and ongoing and proposed United Nations programmes at the country and subnational levels, including targeted and tailored capacity-building for groups at the highest risk of marginalization.
 - Access to compute infrastructure through a distributed approach to making available secure and reliable compute resources for experimental purposes.

- High-quality, multilingual and domain-relevant data sets, building on the work being done within and beyond the United Nations system on improving local language representation in AI systems.
- 58. A global coordination platform for funders and matching mechanism for in-kind contributions could complement existing initiatives ¹⁵ and support coordination, information-sharing and more effective investments in AI capacity-building. These mechanisms could leverage the United Nations system's country presence and experience in delivering capacity-building, including in low- and middle-income countries, in order to maximize learning and amplify impact across regions.

V. Concluding observations

- 59. There is a pressing need to put a floor under the AI divide so as to ensure that the benefits of AI are available to all peoples. This is a critical moment for the building of knowledge, tools and infrastructure, so that no one is left behind in relation to the defining technological revolution of the present decade.
- 60. The international system is in a time of growing fiscal pressures, but cutting back on AI investment now would be short-sighted, as AI is a foundational, general-purpose technology that will shape economic outcomes, societal well-being and global equity for decades to come. Public investment is essential in order to establish a minimum irreducible AI capacity across the world. Such capacity is not only crucial for equity, but also creates opportunities for the private sector. As neglected regions gain access to AI infrastructure and tools, they will become new markets for innovation, services and growth. AI capacity-building should therefore not be seen as an act of charity but as an investment in shared prosperity.
- 61. The United Nations system is uniquely positioned to play a key role in catalysing this work, as an impartial globally inclusive platform with convening power to bring together diverse stakeholders governments, private sector, civil society and academia in support of the common good. The United Nations system can promote AI capacity-building efforts that are truly global, reaching the most vulnerable countries that might be overlooked by market-driven approaches with on-the-ground implementation capacity and contextual understanding that are essential for effective capacity-building.
- 62. Nevertheless, the United Nations cannot and should not act alone. Member States are invited to consider creating centres for exchange and cooperation and offering to have these centres be part of a United Nations-supported network, which would facilitate coordination and the availability of in-kind contributions from universities, corporations, Member States and other relevant actors, and could also undertake a range of other useful activity to build AI capacity, anchored in shared normative commitments.
- 63. There are opportunities for partnerships with multilateral development banks on the governance and operation of a Global Fund for AI, given the growing attention to investments in digital infrastructure. There are also opportunities for partnerships with philanthropic foundations that are already investing in AI capacity-building in neglected regions, particularly in taking forward the coordination platform for funders. In addition, there are opportunities for partnering with the private sector, where capacity in AI is often

¹⁵ Including those within and beyond the United Nations system (see details of the former in the overview of United Nations system AI capacity-building activities in the civilian domain).

highest and where ambitious investments in AI infrastructure are accelerating globally.

64. Considering the capacities, experience and resources that are being committed to AI development by the private sector, philanthropies, multilateral development banks and developed countries, there is broad scope to quickly and effectively build a floor under the AI capacity divide, especially to support Member States that are at risk of falling further behind in this generational moment of technological change.