



Chief Executive Board for Coordination

26 April 2019

CEB/2019/4/Add.2

A UN system-wide strategic approach and roadmap for supporting capacity development on artificial intelligence

prepared by the High-Level Committee on Programmes
under the leadership of ITU

I. Overview

1. This full-fledged draft of the strategic approach, developed in line with HLCP's feedback and guidance since its 34th session, was approved by the Committee at its 37th session. It outlines an internal plan to support capacity development efforts related to Artificial Intelligence (AI) technologies, especially for developing countries, with particular emphasis on the bottom billion¹, in the context of achieving the Sustainable Development Goals (SDGs).
2. The strategic approach includes a roadmap for action which offers a proposed series of concrete steps for building capacity to best harness the benefits of AI technologies and mitigate its risks. Ultimately, when adopted, the system-wide strategic approach on AI capacity-building will guide UN agencies as they prioritize and assess their actions relating to AI in support of Member States—particularly developing and least developed countries.
3. The proposed “UN System-wide Strategic Approach and Roadmap for Supporting Capacity Development on Artificial Intelligence” is part of a wider UN system-wide effort on frontier technologies initiated by CEB through HLCP. It supports the Secretary-General's Strategy on New Technologies which has the stated goal of “defining how the United Nations system will support the use of these technologies to accelerate the achievement of the 2030 Sustainable Development Agenda and to facilitate their alignment with the values enshrined in the UN Charter, the Universal Declaration of Human Rights, and the norms and standards of international law”. The strategic approach also ensures synergies with other inter-related workstreams pursued under the auspices of HLCP, namely system-wide efforts related to the future of work and the future of

¹ CEB/2018/HLCP36/CRP.1: Implications of Frontier Technologies in Developing Countries with a Focus on the Bottom Billion, UNCTAD. The ‘bottom billion’ - people living in extreme poverty trying to survive with less than \$1.90 a day. The term ‘Bottom Billion’ was initially used to refer to the group of countries, most from Sub-Saharan Africa and from Central and South-Asia, whose residents had experienced little income growth over the 1980s and 1990s (Collier, P., 2007. The bottom billion: Why the poorest countries are failing and what can be done about it. Oxford University Press, United Kingdom). The term was also used in the early 2010s to refer to the over 1.3 billion people who at that time were living in extreme poverty, the majority of which were in populous middle-income countries (see for example Sumner, A., 2010. Global poverty and the new bottom billion: What if three-quarters of the world's poor live in middle-income countries?’, IPC-UNDP Working Paper 74, Brasilia: IPC-UNDP). In this paper, the term ‘bottom billion’ refers to the people living in extreme poverty in middle and low-income developing countries.

education and learning. The paper has been prepared under the coordination of ITU in consultation with other UN system organizations and entities.

4. At the request of the ITU, the Berkman Klein Center for Internet & Society's Ethics and Governance of AI team prepared an independent contribution² offering a basis for the United Nations System-wide strategic approach on AI. This contribution drew upon the Berkman Klein Center's significant expertise in considering the effects of emerging technologies, the Center's work as part of the Ethics and Governance of AI initiative, and extensive research relating to the concerns of global policymakers as they seek to respond to the challenges and opportunities of AI technologies. This contribution was key to the ITU's role in leading this HLCP workstream.

II. Background and Approach

5. The discussion paper titled *Artificial Intelligence – Capacity Development: “Leaving No One Behind”*, presented at the 35th HLCP session, based on input from the Berkman Klein Center's Ethics and Governance of AI team, “aimed at examining AI's SDG implications and outlining the opportunity for constructing coordinated system-wide positions and engagement in supporting Member State capacities on AI.”³ At that meeting the HLCP committed to pursuing a three-step approach of: 1) developing “shared guiding principles on AI technologies that would help define the internal strategic direction of the UN system;” 2) “articulating a system-wide framework on AI technologies in order to encourage and guide integrated action within the UN system;” and 3) “elaborating recommendations and concrete actions toward a capacity building programme for developing countries.”⁴
6. An interim draft of this roadmap was presented to the 36th HLCP session. The Committee re-affirmed the three-step approach for supporting AI capacity-building for developing countries and approved the shared guiding principles and the system-wide framework. It requested ITU, in cooperation with interested agencies and taking into account the comments made, to finalize the roadmap for system-wide actions and present the full draft of the strategic approach for HLCP's consideration at its 37th session, bearing in mind the need for prioritization, complementarity, and clearer focus on the bottom billion and leaving no-one behind. HLCP also supported engagement with outside expertise as valuable input to the internal coordination process.
7. This final version approved by the Committee at its 37th Session was prepared taking these aspects into account.
8. The three-step approach, and all the principles that fall under it, will adopt an intersectional approach to address the structural and dynamic consequences of the interaction between multiple and intersecting forms of discrimination and marginalization, including by taking into consideration all conditions that inform the distinct risks and barriers to the opportunities presented by AI technologies, based on

²The contribution from the Berkman Klein Center was prepared by Ryan Budish, Assistant Research Director, and Urs Gasser, Executive Director, in August 2018 as an output from the Ethics and Governance of AI Initiative.

³ Chief Executives Board for Coordination, “Report of the High-Level Committee on Programmes (HLCP) at its thirty-fifth session (UN Headquarters, New York, 9 and 10 April 2018),” CEB/2018/4, May 11, 2018, https://www.unsystem.org/CEBPublicFiles/CEB-2018-4-HLCP35-Report-FINAL_UNEDITED.pdf

⁴Id.

factors such as sex, age, disability status, gender identity, religion, race, ethnicity, class and other grounds.

9. As the foundation under the three-step approach, the following principles were agreed upon by HLCP to guide the development and eventual implementation of a system-wide strategic approach. These proposed principles are:
 - I. AI should be addressed in an ambitious and holistic manner, promoting the use of AI as a tool in the implementation of the SDGs, while also addressing emerging ethical and human rights, decent work, technical and socio-economic challenges.
 - II. All AI related capacity-building programming by UN entities should respect Human Rights principles, thereby helping ensure that a human rights-based approach should be mainstreamed into the approach of Member States on AI.
 - III. AI-related capacity-building program should balance economic, social and environmental goals: reducing inequalities and ensuring equal access to opportunities, promoting productive transformation of the economy and protecting the natural environment. Such a process generates social justice within and between generations, sustainable development, peace and prosperity.
 - IV. AI-related capacity-building programming should gather diverse perspectives on the benefits and risks of AI technologies and take into consideration the needs of all people including those at risk of being left behind, especially the marginalized and vulnerable. People and particularly those farthest behind, including women and girls, should be at the center of all AI-related capacity-building programming and decision-making processes.
 - V. All AI-related capacity-building programming by UN entities should be gender transformative. Gender and age transformative approaches need to be embedded in all AI-related capacity-building programming and decision-making processes. The particular effects of AI on women and girls, and on the increasing digital gender and age divide, should also be taken into account.
 - VI. AI capacity-building programming by UN entities should focus on assisting all Member States to take evidence-based action, noting that the developing countries, particularly LDCs, LLDCs, and SIDS, are the most to benefit from AI-related capacities that promote progress towards SDGs.
 - VII. AI-related capacity-building programming should strive to foster a “whole-of-government” and also a “whole of society” approach, especially taking into account the bottom billion.
 - VIII. AI-related capacity-building programming should make efforts to strengthen multi-stakeholder partnerships, especially between governments, private sector, international organizations, civil society and academia.
 - IX. All AI related programming by UN entities should actively seek cooperation and synergy with complementary developmental programmes that deliver other key elements to reach common goals.
 - X. All AI related programming by UN entities should ensure that a due process was followed to select AI as the appropriate tool to deliver innovative and cost-effective solutions for achieving the SDGs. In this way, the UN would certify that alternative technological solutions were considered, and that AI was used due to its appropriability.

10. This draft strategic approach reflects a synthesis across many different inputs, including concepts and ideas from the preceding discussion papers, related HLCP feedback, existing AI-related initiatives from across the UN System, and extensive research relating to the concerns of global policymakers as they seek to respond to the challenges and opportunities of AI technologies.⁵

III. Key Goals and Motivations

11. Policymakers across the UN system and Member States face significant obstacles to developing comprehensive approaches to AI. AI technologies can be incredibly complex, difficult for many experts to fully explain, let alone non-technical policymakers. Moreover, the developments and impacts of AI are unevenly distributed, both in terms of the pace of change as well as the geographies and demographics of where those impacts are realized. This poses a challenge for policymakers, because we are still very early in the process of fully understanding the social, political, economic, ethical and technical impacts of these various technologies. The realized and potential impacts are often unequally distributed, with different cultural, social, economic, and political contexts, dramatically shaping the ways in which the impacts from AI's development and deployment will be felt. For those reasons, there is no single approach that would work for all AI technologies, for all potential impacts, for all contexts.
12. Because of these differences, we have identified four distinct layers of capacity development: (1) infrastructure; (2) data; (3) human capital and social capabilities; and (4) policy/law/human rights. AI's impacts are felt across almost every layer of society, and by the same token, UN Agencies should ensure that their approaches to AI capacity-building address the impacts across each of these layers. The goals for this draft strategic approach mirror this same multi-layered structure beginning with the general and including the four layers.

***General:** To assist UN Agencies to take concrete actions that will help ensure that AI's opportunities are more fully and equitably realized across geographies, political and social contexts, and diverse stakeholders, while advancing the achievement of the SDGs. Throughout this draft strategic approach, there reflects a commitment to leaving no one behind and reaching the furthest behind first, and ensuring that policy approaches to AI reflect the inclusion of diverse stakeholders and perspectives, especially the most disadvantaged, often underrepresented in the development and deployment of today's technology. In many cases the steps below help to build capacity, further our understanding of AI's impacts, and build an evidence base, so that policymakers can in the future develop related policy frameworks, as needed.*

***Infrastructure:** The increased deployment of AI technology is amplifying existing needs for Internet infrastructure and exacerbating current digital inclusion gaps. More work must be done to bridge the digital divide, including the digital gender divide, to ensure that increased adoption of AI systems does not disproportionately and negatively impact nations and their citizens, particularly vulnerable persons,*

⁵See, e.g., Urs Gasser, et al., "Module on Setting the Stage for AI Governance: Interfaces, Infrastructures, and Institutions for Policymakers and Regulators," ITU Global Symposium for Regulators, Artificial Intelligence (AI) for Development Series Discussion Draft, July, 2018, https://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2018/documents/AISeries_GovernanceModule_GSR18.pdf

especially those in low and middle-income nations with underdeveloped infrastructures⁶.

Data: Data is a necessary input for many AI technologies; the utility of these AI-based systems depend on the quality and quantity of data sets from which such systems learn and evolve. More robust, open, inclusive, and representative data sets (along with commensurately robust security and privacy) will both act as a foundation for technical innovation, but also help policymakers understand how AI-based technologies may impact jobs, labor forces, mobility, public services, governmental transparency, and security, furthering evidenced-based decision-making. Ensuring this in developing countries would be particularly important in order to realize the promise of leaving no one behind.

Human Capital and Social Capabilities: In order to actively participate in the creation and maintenance of AI technologies and applications, specialized technological and mathematical knowledge is critical. Yet, AI talent is scarce even in developed countries and critically so in developing countries. This highlights the need to provide digital skills in education and training systems along with core competences, new mindsets and attitudes that build up a society's capabilities to innovate. Particular attention should be placed on the recruitment of women and girls to the study of Science, Technology, Engineering and Mathematics (STEM). Research capacity should be fostered and bolstered, while simultaneously working to mitigate AI's potentially substantial effects on labor in other fields. And in order to effectively address the policy questions AI technologies raise, the gaps and information asymmetries between technical experts and policymakers must be minimized.

Policy, Law, and Human Rights: Existing frameworks for policy, law, and human rights may not adequately address the impacts of AI that we face in the near-term future. A combination of good oversight and perhaps new normative standards may be needed to achieve fair, transparent and accountable algorithmic decision processes, prevent discrimination and bias and, as the Global Commission on the Future of Work's report⁷ recommends, implement a "human-in-command" approach that ensures the final decisions affecting work are taken by human beings, not algorithms. Building on a long tradition of promoting human and workers' rights, the UN System can help Member States, especially developing nations, have guardrails that leave open opportunities for experimentation and innovation, while protecting vulnerable populations and workers in the newly emerging digital platform-based economies. The UN System can even consider how emerging technologies can be leveraged to advance human rights and gender equality, and to help formalizing work and training in the informal economy. Also, capacity should be improved in developing countries to design and implement innovation policies.

13. These goals are not mutually exclusive; in fact, most of the commitments and measures in the roadmap below address multiple goals at a time. For that reason, this draft strategic approach is not organized around goals. Instead, it acknowledges that AI is not one monolithic technology with unitary impacts. It recognizes that AI has the properties of a

⁶ It is important to recognize that the development and application of AI also depends on a range of other infrastructures that support general technological development. e.g. Firms cannot develop and apply AI technologies if they don't have access to state-of-the-art technical facilities, and "soft" infrastructures such as financial infrastructures (e.g. payment systems, insurance services, etc.) and legal and business services.

⁷ Work for a Brighter Future, ILO Global Commission on the Future of Work. 22 January 2019.

general purpose technology which means that it will open wide opportunities for applications and product innovations. They will be deployed in many cultural, social, economic, and political contexts, each creating its own unique challenges and opportunities. As a result, this draft roadmap includes three different clusters of actions, corresponding to our collective understanding (or lack thereof) of AI's current and potential impacts and the efficacy of policy responses – all with the aim of supporting AI-related capacity-building in the context of realizing the SDGs:

- 1) **High Certainty – Immediate Action.** In some circumstances the impacts and opportunities of AI technologies are relatively clear and straightforward, and the steps that the UN System can take are correspondingly clear.
- 2) **Evolving Knowledge – More Evidence and Experimentation Needed.** In other cases, there are strong hypotheses about the positive and negative impacts that AI technologies might have, but more research, data, and experimentation is still needed to develop holistic policy responses. In these cases, the roadmap points toward ways to collect that information.
- 3) **High Uncertainty – Balancing Innovation with Guardrails.** And finally, there remain spaces where the technologies are still too new, the medium and long-term implications too speculative, and/or the potential responses too underdeveloped. In these cases, the roadmap points toward creating an opportunity for experimentation and innovation, while presenting guardrails to ensure safety and security.

IV. Roadmap for Action - Commitments and Measures

14. The table below shows possible areas of commitment and measures, categorized by the above-mentioned three clusters, that the UN system may consider pursuing to help enhance AI-related capacities, especially in developing countries.⁸
15. It represents a comprehensive collection of ideas and suggestions gathered through consultations within the HLCP AI task group, HLCP's other closely-related workstreams (future of education and learning and future of work), as well as HLCP discussion papers such as "Implications of Frontier Technologies in Developing Countries with a Focus on the Bottom Billion" prepared by UNCTAD.
16. The commitments and actions are prioritized to promote system-wide action on:
 - 1) Capacity building on AI for developing countries with a focus on the bottom billion;
 - 2) Supporting broader stakeholder engagement and knowledge exchange within and outside the UN System on AI; and
 - 3) Promoting the ethical development and application of AI technologies for public good.

⁸After the actions - commitments and measures - are approved, as part of the implementation plan, for each agreed measure, referencing metrics and "interested entities will be identified. The metrics could be from existing framework or initiatives, or new ones as appropriate. For example, for measure 1.4, "Broadband Commission on National Plans & ITU 2023 Target," etc.

Commitment	Measures
<u>High Certainty – Immediate Action</u>	
<p><i>With a distinct focus on reaching the bottom billion -</i></p> <p>1. Enhance technical infrastructure and support the development of national and regional AI and digital strategies, with a focus on continuing to close the digital divide</p>	<p>1.1. Expand efforts to help deploy widespread, high-capacity broadband to connect the 50% of the world that’s offline, especially the bottom billion.</p> <p>1.2. Collaborate with national and regional ICT authorities to promote equitable distribution of infrastructure investments and developments.</p> <p>1.3. Develop templates and guidelines for public-private investment agreements that facilitate greater investments in Internet infrastructure, ensuring that the benefits of such investments are shared widely across society, with a particular focus on those groups that are most likely to be left behind, including women and girls, persons with disabilities, migrants and refugees, rural people and indigenous people.</p> <p>1.4. Advise in the creation of national and regional digital and AI strategies, including to ensure that (a) such strategies consider and reflect the needs of disadvantaged, vulnerable, and marginalized populations, including women and girls, (b) cybersecurity and data privacy are a key component of all digital infrastructure projects, and (c) specific AI infrastructure needs, such as e.g. enhanced computing and data processing capacity, are taken into account.</p>
<p>2. Increase AI-related human capacity through supporting high quality and inclusive education, learning and training policies and programmes as well as reskilling and retraining of workers, including women and girls</p>	<p>* 2.1. Human capacity building – including education and reskilling – is a critical element of efforts to ensure employability of workers and that no one is left behind. Taking into consideration requirements of the bottom billion has to ensure that the most marginalized and those that are most vulnerable to the risks and barriers that AI presents, including women and the elderly, are empowered.</p> <p>In this regard, a key strategy is to enrich and diversify the knowledge base of the labor force, and promote socially shared mindsets that enable enterprises and organisations to rapidly adopt and diffuse new AI technologies, and thus to shape the future of work and progress towards the SDGs. This strategy needs to address learning in schools and workplace, social networks such as families and communities, occupational and organisational networks, also using digital platform and AI tools. These aspects are further elaborated in the Future of Learning and Education and the Future of Work strategies.</p>

<p>3. In order to better understand the opportunities and challenges of AI to allow for effective capacity building in Member States - improve internal UN institutional capacities around AI through bringing in greater technical expertise and facilitating intellectual exchanges with private sector and academia⁹</p>	<p>3.1. Create mechanisms for AI education and capacity building for UN staff. Partner with private sector and academia in this regard.</p>
	<p>3.2. Reduce hurdles for AI-related knowledge sharing across the UN System to ensure that existing knowledge is not trapped within silos; Conduct and publish annual surveys of existing AI knowledge and capacity across the UN System.</p>
	<p>3.3. Launch small AI development pilot projects encouraging collaboration among multiple UN agencies – preferably testbeds focusing on the bottom billion - in order to create learning and experiences about the way AI technologies are being developed and applied in support of SDGs, and how they might evolve in the future. Develop guidelines to help agencies incorporate AI technologies in their initiatives.</p>
	<p>3.4. Promote and support regular visits by UN agency staff and Member State representatives, especially from developing countries, to geographically diverse AI-based businesses, startups, and research institutions.</p>
<p><u>Evolving Knowledge – More Evidence and Experimentation Needed</u></p>	
<p>4. Support broader stakeholder engagement from developing countries to ensure that AI policies reflect a wider diversity of concerns, opportunities, and impacts – especially unique perspectives and requirements of those at greatest risk of being left behind</p>	<p>4.1. Facilitate the development and adoption of consensus terminology for describing the technical, ethical, socio-economic and human rights challenges of AI, especially those related to developing countries, and for developing shared solutions.</p>
	<p>4.2. Promote and support more inclusive multi-stakeholder participation in both UN-convened and externally organized platforms and organizations related to AI.</p> <p>In this regard, launch initiatives to lower the financial, knowledge, accessibility and social barriers to effective participation of all stakeholders – with a focus on increasing participation from developing countries, as well as increased participation by women and girls.</p>
	<p>4.3. Enhance online platforms to expand capacity and global reach for public dialogue about AI-related policy proposals, ensuring that such platforms are especially accessible in technology-marginalized countries and communities.</p>

⁹ Some of these actions may fall under the purview of HLCM, but are included here for completeness. As appropriate, recommendations and inputs through this HLCP process will be offered for HLCM's consideration, especially in the context of its upcoming consideration of the future of work in the context of UN management.

<p>5. Facilitate ongoing knowledge exchange among the public and private sectors and other stakeholders, and across public sector entities, and promote developing countries' access to global standards and best practices</p>	<p>5.1. Build a repository of AI policy challenges and successes from diverse stakeholders - including the various solutions tried and their impacts, especially those solutions that are focused on the bottom billion, and on those at greatest risk of being left behind, including women and girls.</p>
	<p>5.2. Encourage standards development by creating procurement standards and developing standards for production processes.</p>
	<p>5.3. Improve capacity in developing countries to plan for new technologies through facilitating foresight analysis exercises and technology impact assessments that consider the effects of technological change, and identify potential setbacks and challenges while considering technological gaps within and between countries.</p>
<p>6. Increase UN System and Member State capacity, particularly in developing countries, to collect, analyze, and share open, interoperable sex-disaggregated datasets, as well as AI tools to support both AI innovation and the monitoring of AI's impacts</p>	<p>6.1. Encourage more robust data philanthropy through incentives, especially from the private sector, for sex-disaggregated data related to the poorest and marginalized who may not be currently generating sufficient data to reflect their needs, and where public data may not be available or insufficient, while respecting their rights to privacy and data security. Similarly, also encourage sharing of open algorithms and tools.</p> <p>Negotiate global arrangements with global private sector data providers for use by all Member States, including developing countries.</p>
	<p>6.2. Considering the diversity of datasets maintained in different agencies across the UN system, develop a labeling system for UN datasets, scoring each dataset based on its comprehensiveness, representativeness, trustworthiness and suitability for different AI-based applications – especially those offering solutions for the needs of people at greatest risk of being left behind.</p>
	<p>6.3. Encourage adoption of standards to help ensure the privacy, security, diversity, and inclusiveness of AI training data (especially data related to the marginalized and vulnerable).</p> <p>In this regard, develop and promote policies regarding access to data, transparency in data ownership, data openness, data aggregation, interoperability, and transparency regarding data use.</p>

High Uncertainty – Balancing Innovation with Guardrails

<p>7. Support sustainable and robust local AI technology innovation and entrepreneurship for public good in developing countries; Open opportunities for leapfrogging the SDG achievement</p>	<p>7.1. Identify and disseminate best practices for Member State direct investment initiatives in local AI startups and businesses for public good.</p>
	<p>7.2. Develop templates for public-private incubators, which combine government investment and private equity to support local AI startups for public good.</p>
	<p>7.3. Foster the launch of local and regional AI innovation hubs, which can include providing physical space, funding, mentorship, and networking, especially for developing innovative solutions that focus on the needs of the bottom billion, create jobs and decent work, a fair distribution of the gains resulting from investment in AI innovations, while also protecting the natural environment for a sustainable development process.</p>
	<p>7.4. Assist Member States, regional, and international organizations in conducting legal and policy assessments to help foster local AI innovation, including robustness of privacy and intellectual property frameworks at the local, national, regional and international levels.</p>
	<p>7.5. Facilitate the convening of local and national university officials to exchange lessons and best practices around commercializing AI technologies from university research laboratories, particularly encouraging research, development and adaptation of technologies that focus on grassroots solutions.</p>
<p>8. Recognizing that solutions that address the bottom billion may require fresh innovative solutions and new business models, support regulatory sandboxes to allow experimentation, while limiting potential harms</p>	<p>8.1. Create regulatory toolkits and identify best practices for the establishment of AI regulatory sandboxes.</p>
	<p>8.2. Facilitate mechanisms for bringing together public and private organizations that have worked with regulatory sandboxes in both AI and non-AI contexts, and translating out lessons learned from those experiences.</p>

<p>9. Maintain strong ethical and human rights guardrails, ensuring that AI developments does not exceed the capacity to protect society, particularly the poorest, marginalized and vulnerable populations, including women and girls</p>	<p>9.1. Support diverse and inclusive efforts at developing technical and ethical standards for AI deployment and use, including in the world of work.</p>
	<p>9.2. Work with Member States to review existing UN instruments and frameworks to identify gaps where existing processes may not be able to keep pace with developments in AI-technologies, also taking into account emerging guidelines and principles being developed by other international organizations or the private sector.</p>
	<p>9.3. Convene, as necessary,¹⁰ consultations with governments, social partners and multi-stakeholder experts, to identify areas where AI technologies can be leveraged to promote human rights, labour standards, decent work and advance SDGs.</p>
	<p>9.4. Develop, building further on the existing efforts, policy and legal toolkits (with input from diverse stakeholders) that aim to ensure that AI systems fully respect human and worker rights, take into consideration local norms and ethics, and do not contribute to, replicate or exacerbate biases including on the basis of gender, race, age and nationality, and in areas such as crime prevention</p>
	<p>9.5 Considering of the risks posed by the possible uses of AI for criminal activities, support Member States in developing relevant policy and legal frameworks that act to prevent and counter such threats.</p>

V. Implementation Plan

17. The HLCP, while endorsing the strategy, underscored a sense of urgency and the need for immediate action given the speed with which AI is effecting societal transformation and, thus, recognized the importance and timeliness of this strategy. Stressing the necessity to swiftly move forward towards its impactful operationalization, members expressed strong support to pursue multi-stakeholder engagement, particularly through the inclusion of the private sector, to transform ideas into value, while also highlighting the need for a cooperative and participatory approach with affected communities. Members also pointed out that the UN system needed to adopt a collaborative approach and foster knowledge-sharing practices.

18. Implementation of the strategic approach and its roadmap for action will be carried forward by collaborative efforts of relevant UN entities, taking into consideration the strengths of each entity based on the four distinct layers of capacity development, in due

¹⁰ e.g., building, as appropriate, on the relevant findings and recommendations from the upcoming report of the Secretary-General's panel on Digital Cooperation.

linkage with relevant inter-agency mechanisms, including those that are operationally-oriented/mandated. In pursuing coherent and effective system-wide implementation, coordination, collaboration, and synergy are of key importance.

19. Once approved by CEB, the first step towards implementation of the strategic framework would be to develop a concrete work plan for realizing the roadmap, which will entail prioritizing the various action areas, and identifying various UN entities interested in leading/contributing to these areas. ITU, as the lead-agency for the development of the strategic approach and roadmap for action, will continue to serve as the institutional focal point for promoting coordinated implementation in close collaboration with all relevant UN entities, working closely with outside partners as appropriate.
20. Throughout implementation efforts, synergies and complementarities with other ongoing and related efforts, including the Secretary-General's Strategy on New Technologies, the UN Innovation Network and other existing inter-agency mechanisms, will be ensured.

VI. Next Steps

21. The Committee has approved the draft UN system-wide strategic approach and roadmap for supporting capacity development on artificial intelligence, for onward submission to CEB for endorsement.
22. CEB is invited to consider (for endorsement) the proposed system-wide strategic approach and roadmap for action.