

GLOBAL EDUCATION EVENT ON QUANTUM SCIENCE AND TECHNOLOGY HELD AT THE 2025 AFRICA REGIONAL CONFERENCE & EXHIBITION ON EDUCATION AND SKILLS DEVELOPMENT (ARC-EDS)

5th – 7th
August 2025

Accra International
Conference Centre

**Accra Communiqué on Quantum Science
and Technology**

Preamble

We, the participants of the Global Education Event held during the 2025 Africa Regional Conference & Exhibition on Education and Skills Development (ARC-EDS), convened in Accra from 5th to 7th August 2025 to explore strategic pathways for advancing Quantum Science and Technology (QST) as a driver of sustainable development, innovation, and youth employment.

We acknowledge the significance of this high-level engagement, bringing together government, academia, industry, civil society, and international organizations, and affirm Ghana's pivotal role in proposing the IYQ2025 resolution and hosting one of the ten official global IYQ events. This milestone created a catalytic platform to reaffirm both national and continental leadership in frontier science and to galvanise action across sectors.

Recognizing That:

- Quantum Science and Technology (QST) holds transformative potential across national security, education, healthcare, finance, agriculture, and energy systems;
- Ghana is strategically positioned to lead QST advancement in Africa, building on the legacy of the late Prof. F.K.A. Allotey and longstanding contributions to global science diplomacy;
- Africa risks widening the “quantum divide” without coordinated investment in education, research, infrastructure, and innovation capacity;
- QST advancement must be inclusive, future-focused, and aligned with national development plans, Agenda 2063, and the United Nations Sustainable Development Goals (SDGs).
- There is a growing urgency to avoid the deepening of the global “quantum divide” that could marginalize countries without quantum capabilities in the digital and scientific economies of the future;

We Affirm:

We affirm the following commitments to position Ghana and Africa as active players in the global quantum revolution:

- ***Establish Interim Leadership of the Ghana Quantum Consortium (GQC):*** The IYQ2025 Planning Committee shall serve as the interim leadership team to facilitate national coordination, initiate stakeholder engagement, and guide the institutionalisation of the GQC by March 2026.
- ***Constitute a National Quantum Strategy:*** An inclusive and operational national consortium shall be constituted by September 2025 to coordinate QST efforts across academia, policy, industry, and civil society. The IYQ2025 Planning Committee shall serve as the interim leadership to guide its formalisation.
- ***Promote Quantum Education and Skills Development:*** Institutions shall initiate curriculum review and integration of quantum science into STEM-related fields at all levels of education: basic, secondary, and tertiary, beginning in the 2026 academic year. The national goal is to train at least 10,000 quantum-literate STEM professionals by 2030.
- ***Strengthen Industry–Academia Partnerships for Innovation:*** A national dialogue with the private sector will be convened by July 2026 to identify co-funded pilots in quantum encryption, AI, sensing, material technology, and secure communication. Public–private partnerships and incentives schemes will be explored to support innovation uptake.
- ***Define and Implement a Post-IYQ Legacy Framework:*** Ghana will finalise a legacy framework by February 2026, including:
 - a. Annual F.K.A. Allotey Quantum Lecture Series
 - b. National science awareness campaigns
 - c. Dedicated funding for early-career quantum researchers
 - d. Integration of QST into national STI and education sector reforms
- ***Convene a Continental QST Consortium:*** Ghana shall initiate consultations with African governments, scientific institutions, and regional organisations to establish a Continental Quantum Science and Technology Consortium. An inaugural African QST Roundtable will be convened by early 2026 to define a shared vision, collaboration framework, and investment strategy.

Call to Action

We call upon:

- ***The Government of Ghana*** to champion QST as a national development priority and provide enabling policy, funding, and institutional support
- ***Academic and Research Institutions*** to deepen collaboration, establish centres of excellence, and share infrastructure for quantum education and R&D;
- ***Private Sector and Industry*** such as the Volta River Authority (VRA), Electricity Company of Ghana (ECG), Ghana Grid Company (GRIDco) etc. to invest in co-innovation, fellowships, and applications of QST to enhance competitiveness and drive job creation;
- ***Civil Society and Youth Movements*** to raise awareness and promote inclusive participation in the quantum revolution;
- ***Development Partners, UNESCO, and the IYQ Steering Committee*** to support Africa's emerging QST ecosystem through technical assistance, funding, and long-term partnerships.
- ***African Governments and Institutions*** to embrace regional cooperation in quantum science, shaping a united African presence in the global quantum landscape.

Conclusion

ARC-EDS 2025 has amplified our collective resolve to advance quantum readiness in Ghana and across Africa. Let this communiqué serve as a bold declaration of our shared commitment to transition from vision to implementation, with clarity, coherence, and collaboration.

Africa must not remain on the margins of the quantum era. The time to act is now.

Let's Quantum Together.

