

Quad Principles on Technology Design, Development, Governance, and Use

September 24, 2021

The Quad countries (Australia, India, Japan, and the United States of America) affirm that the ways in which technology is designed, developed, governed, and used should be shaped by our shared democratic values and respect for universal human rights. Technology should make the lives of our citizens more secure, prosperous, and rewarding, addressing some of the world's greatest shared challenges, like equitable growth, climate change, energy security, and pandemic diseases. We are committed to fostering an open, accessible, and secure technology ecosystem, based on mutual trust and confidence, and we welcome all nations to support the following principles:

- **Support universal values.**
 - We are committed to the development of critical and emerging technology that yields tangible benefits for society, developed through a multi-stakeholder approach that is adaptive, dynamic, and aligns with universal values, including respect for freedom of expression and privacy.
 - We support approaches to technological design, development, governance, and usage that promote our shared values, including the autonomy, agency, and dignity of individuals.
 - The design, development, governance and use of technology should be an equitable and inclusive process that neither involves nor results in unfair discriminatory action.
 - Technology should not be misused or abused for malicious activities such as authoritarian surveillance and oppression, for terrorist purposes, or to disseminate disinformation.

- **Build trust, integrity, and resilience.**
 - Technology ecosystems built upon trust, integrity, and resilience foster innovation.
 - We support openness and interoperability to enable collaboration and to welcome innovators who are both diverse in their gender, race, and ethnicity, as well as in the size, structure, and age of their organizations.
 - We expect technology suppliers, vendors, and distributors to produce and maintain secure systems, and to be trustworthy, transparent, and accountable in their practices. Technology developers should also build in safety and security-by-design approaches so that robust safety and security practices are a part of the technology development process. Illicit transfer or theft of technology is a common challenge that

undermines the very foundation of global technological development and should be addressed.

- Resilient, diverse, and secure technology supply chains – for hardware, software, and services – are vital to our shared national interests. Close cooperation on supply chains with allies and partners who share our values will enhance our security and prosperity, and strengthen our capacity to respond to international disasters and emergencies.

- **Foster healthy competition and international collaboration to advance the frontier of science and technology.**

- A fair and open marketplace is a cornerstone of innovation and inclusive prosperity.
- We support free and fair market competition in which the best technical solutions succeed, including with the help of transparently-awarded state incentives.
- We encourage the development of competitive technology ecosystems that welcome new market entrants, including start-ups, and enhance innovation, resilience, and sustainability.
- We recognize and affirm the importance of industry-led, consensus-based multi-stakeholder approaches to international standards development that foster interoperability, compatibility, and inclusiveness.
- We are committed to reducing barriers to data and knowledge sharing for research projects and greater innovation, while protecting research security.
- We are also committed to facilitating the exchange of researchers and movement of highly skilled personnel to enhance science and technology collaboration.
- We are committed to developing shared research and development agendas, to include joint projects and joint capacity building where possible, that align with foundational scientific principles, further our common values, and promote workforce diversity and education.
- Together, we will continue to keep pace with changes in the global economy and innovation processes by monitoring future trends and harnessing the opportunities to advance technologies to address many of our shared objectives: security and resilience, sustainability, economic inclusion, and health and wellbeing.
- We are committed to fostering technology development that accelerates economic progress and serves the needs of all of our citizens.

We welcome all nations to join us in pursuit of this shared vision for technologies, guided by these principles.