The Quantum Governance and Values Lab at TU Delft

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The Quantum Governance and Values Lab at TU Delft

With QuTech it is TU Delft support to the EU TCL Quantum Internet Policy Lab

Goal: research on the role of systems, governance, and values in the development of quantum technologies

- on standardization
- on systems integration
- on adoption by industry and society
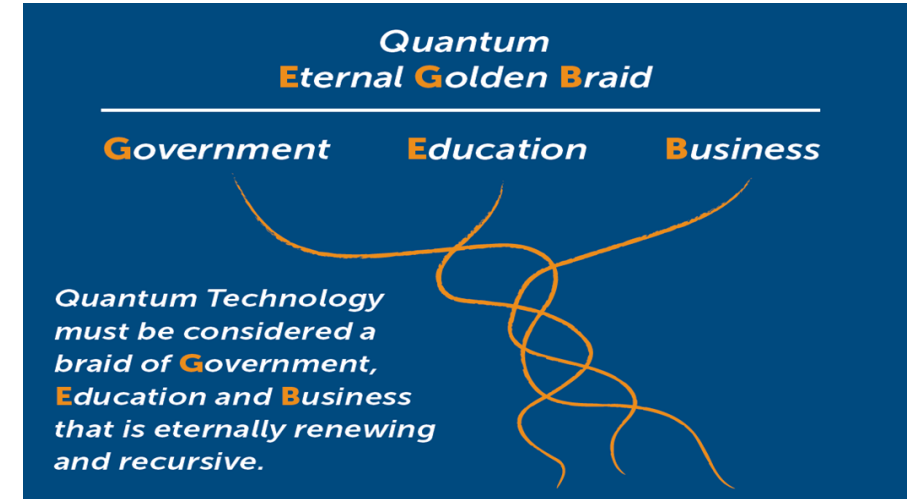- on moral and societal improvement

A blank in the quantum ecosystem

Supporting policy makers in quantum technologies

2019 Dutch National Agenda for Quantum Technology

"Innovation in science and technology is increasingly complex and requires continuous collaboration involving science, industry, government and society."

- the scientists, engineers, and industrialists have their labs;

- now policy makers have one too

Specific to quantum tech: the need to make new trade-off's

2023 European Declaration on Quantum Technologies: Quantum Valley

Science → R&D → Industry → Use cases → Markets   for economic gain

Task: - Policy for speeding up commercialisation

Specific to quantum tech: the need to make new trade-off's

2023 European Declaration on Quantum Technologies: Quantum Valley

2024 Draghi's report of European competitiveness

2025 Call for Evidence for EU Quantum Strategy

for Europe's values

Science → R&D → Industry → Use cases → Markets   for economic gains

for sovereignty

Tasks: - Policy for speeding up commercialisation

- Translating European sovereignty into technology policy

- Making trade-offs between economics, Europe's values and sovereignty

Examples of our research and policy support

The adoption of post quantum encryption by the Dutch government

- Marijn Janssen & Nitesh Bharosa

Market opportunities and risks for quantum technologies

- Roland Ortt & Barbara van Veen

The ethics of the trade-offs between economics, Europe's values and sovereignty

- Pieter Vermaas & Clare Shelley-Egan

Ready for supporting policy making for developing Europe' s quantum internet