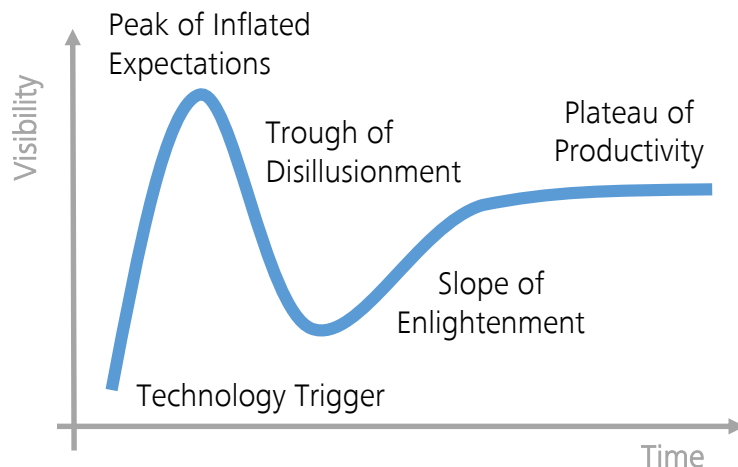


Quantum Computing and Quantum Communication

Results of the Breakout Session

Current Status

Technology	Time to Market (in years)
Fiber based QKD	0
Quantum random number generators	0
Quantum annealing	3-5



Roadblocks

Quantum Computing

- Software
- Hardware/Technology
- Infrastructure (valley of death)
- Financial aspects (longterm VC)
- Education (engineering/ natural sciences)

Quantum Communication

- Communication (internal/external)
- Infrastructure (Standards, Hardware)
- Hardware (Devices, Systems)
- Software (applications)
- Education (interdisciplinarity)

Recommendations

Quantum Computing

- Open access (industrial and governmental)
- Development chain fundamental research to engineering
- Interdisciplinary education
- Funding fundamental research
- Government incentives for venture capital / early adopter
- Measures against brain drain / knowledge protection

Quantum Communication

- Interdisciplinary research initiatives
- Interdisciplinary education
- Support of enabling technologies ecosystem
- Policy to protect knowledge
- Funding fundamental research

Roadblocks



Recommendations

