

**Question for written answer E-001065/2021  
to the Commission**  
Rule 138  
**Christine Anderson (ID)**

Subject: Quantum computers and possible threats to encryption and digital currencies

Research into and development of quantum computers continues to advance<sup>1</sup>. It is said that, owing to their specific architecture, quantum computers may be able to crack and circumvent today's cryptography and encryption systems. Digital currencies are based on cryptography and quantum computers could therefore have a significant impact on digital currencies and thus on the financial and economic system.

1. What insight does the Commission have as regards the current state of development of quantum computers, and does it see, in this context, any threats to encrypted private data and encrypted private communications for the citizens of the Member States in the foreseeable future?
2. What information does the Commission possess to indicate that quantum computers pose a threat to cryptocurrencies and, in the Commission's view, what impact could this have on the stability of the financial system and the economy?
3. What is the situation regarding quantum computers specifically in relation to the EU's digital currency, are there any risks to the digital currency to be developed and how is the 'e-euro' protected against possible threats resulting from quantum computers?

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<sup>1</sup> <https://www.btc-echo.de/bitcoin-bedrohung-forscher-geben-quantencomputer-kostprobe>