Technology Talks Austria 2026: Resümee des Workshops 01

Taking the Quantum Leap – How can Europe become the industrial powerhouse of quantum technology

Teilnehmer:innen:

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- Kilian **Gross**, Director of Enabling and Emerging Technologies, European Commission
- Freeke **Heijman-te Paske**, Vice-President, European Quantum Industry Consortium (QuIC)
- Sabine **Herlitschka**, CEO, Infineon Technologies Austria AG and Vice-President, Austrian Federation of Industries (IV)
- Thomas **Monz**, Founder and CEO, Alpine Quantum Technologies GmbH (AQT)
- Alexandra-Gwyn **Paetz**, Director-General, Technological Sovereignty and Innovation, Federal Ministry of Research, Technology and Space (Germany)
- Felix **Tiefenbacher**, Founder and CEO, zerothird GmbH

The international quantum race is currently accelerating tremendously! In 2025, quantum technologies reached a turning point with investments in quantum startups reaching USD 3.9 billion across 127 deals - the highest annual total on record. Therefore, Europe needs to transfer its high level of excellency and international standing into internationally scaling products and services in fields such as quantum computing, quantum communication, or quantum sensing. Now, Europe must take decisive action for a leading position in quantum computing, not to lose startups and scale-ups, and we need to build European value chains for quantum technologies for global markets. Therefore, the vffi/IV dedicated the workshop to the international quantum race and growing opportunities in industrial scaling of quantum technologies for our prosperity and security.

The workshop had two distinctive goals. First, to raise awareness of the future chances of quantum technologies – especially quantum computing, quantum communication, quantum encryption and quantum sensing - and its powerful contribution to robust solutions for major challenges. The second goal was to encourage policymakers to take concrete decisions that ensure Europe acts in a targeted and effective manner in this area, e.g. moving towards a Quantum Act and Quantum Computer.

In his welcome speech, IV-secretary general **Christoph Neumayer** put a strong focus on the need for venture capital to enable our Deep Tech companies to scale-up in Europe. He pointed out that Austria needs to swiftly move the fund-of-funds for scale-ups envisaged in Austria's Industrial Strategy 2035 into its operational phase, with a particular focus on retaining scale-ups in Austria. It should bridge the financing gap between a successful start-up and a future internationally competitive company. At EU level, the rapid implementation of the EU Scale-up Fund has recently demonstrated how this can be achieved. Europe and Austria must also strive to become global leaders in the commercialisation of key technologies such as quantum technologies. He also pointed out that Austria has already set a strong basis with the Quantum Sciences cluster of excellence for basic research and the new € 30 million investment of the Austrian government in an Austrian Quantum Cluster – dedicated to building a strong ecosystem and to foster the technology transfer and strong collaboration of all quantum technology stakeholders.

In his input Kilian **Gross** gives an insight in the past and upcoming activities of the European Commission to foster quantum technologies in Europe. The upcoming EU Quantum Act will

focus on the coordination of the research and innovation investments across the EU Member States, improving the EU industrial capacity in designing and producing quantum technologies, and ensuring the security and resilience of quantum supply chains. Gross puts a strong focus on bringing together the national quantum strategies and resources and the importance of quantum technologies for the European sovereignty.

The second input was given by Freeke H**eijman-te Paske**. She pointed out that the fragmentation of the European market needs to be tackled and the strong need to align strategies and initiatives better across Europe, as well as jointly coordinated initiatives across countries. In addition, she asked for priorities in research and innovation topics and for higher speed in European decision making.

In the following discussion led by **Tanja Traxler**, the panellists concentrated on two main topics: the upcoming quantum technologies - quantum computing, quantum communication / post-quantum cryptography, and quantum sensing - solutions and opportunities. And what needs to be done for Europe to become an industrial powerhouse, for quantum technology value chains in Europe, and build up production facilities and speed up industry adoption. The discussion also focused on a clear mission for Europe, and how to create strong quantum ecosystems in Europe.

Sabine Herlitschka, Vice President of the Federation of Austrian Industries and CEO of Infineon Technologies Austria AG stressed the strong need for bold, clearly defined ambitions for quantum products and services that can scale globally, in quantum computing, quantum communication, quantum cryptography and quantum sensing. One concrete goal could be for Europe to be the first to bring a next-generation quantum computer to market by 2030, for example through a European Quantum Computing Challenge. Achieving this would require capital mobilized through public-private partnerships, as well as an effective public procurement system. **Sabine Herlitschka** emphasized that nothing less than Europe's sovereignty and technological leadership is at stake.

Kilian Gross pointed out that Europe needs to tackle two key challenges: demand and access to risk capital. The European Commission is currently exploring ways to mobilize private equity to help promising start-ups to stay in Europe and scale their businesses. Europe must also strengthen innovation procurement through challenges and create a monitoring and mapping of key quantum technology market players.

Freeke H**eijman-te Paske** stressed the need for Europe to strengthen collaboration across Member States, research and industry. Promising start-ups and scale-ups need to be better connected with Europe's industrial leaders. At the same time, established companies must accelerate the adoption of quantum technologies. Building a competitive European quantum industry requires a full industrial ecosystem, not start-ups alone.

Alexandra-Gwyn **Paetz** stated that quantum technologies offer major industrial opportunities across virtually all sectors. She stressed that there is no area that will not be affected. Europe must move beyond national approaches and build stronger coordination and ecosystems at European level. Acting now on talent and infrastructure will be critical to accelerate industrial uptake and attract private capital.

Thomas **Monz** stressed that Europe needs to take the leap in quantum technologies and create the confidence to invest and take risks. Europe now must accelerate adoption and turn technological leadership into industrial scale. He explained how quantum computing is moving into real-world infrastructure with first entities already installed in data centres and HPC environments.

Alberta **Bonanni** put a strong focus on talent: Europe needs to build quantum talent from an early stage. European universities must also strengthen entrepreneurial thinking, and all stakeholders must prepare for the convergence of AI and quantum. Closer cooperation between academia and industry is essential to align capabilities with industrial needs - as for example in the Christian doppler laboratories.

Felix **Tiefenbacher**: pointed out that Scale-ups need customers and markets, not only capital. Procurers must be more open to innovative solutions. Quantum communication offers strong

potential for protecting critical infrastructure and securing sensitive data, particularly in sectors with complex international networks such as banking.