SECOND EDITION

QUANTUM NETWORKS
SUMMIT 2025

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QUANTUM NETWORKS
25&26 MARCH 2025

Bridging Communities for Data Privacy and Security in the Quantum Area

The Quantum Networks Summit closed its doors the 11th April on a successful first edition both in terms of content than attendance.

According to the participants, the conference was the very first event 100% dedicated to networking in the quantum research & industry new paradigm.

The second edition of the Quantum Networks Conference will confirm this initial success and will stand at the Palais des Congrès de Paris the 25th and 26th of March 2025.

The agenda: Quantum Ecosystem, Beyond QKD, Hybrid Models

Renowned experts will explore significant developments across key regions. They will focus on building a quantum-safe portfolio, pricing strategies, and how to position these services in a competitive market.

Delving in encryption aspects they will demonstrate what is needed to evolve current state of the art quantum networks (QKD) to the next level.

Finally, they will explore hybrid key exchange as a solution, combining the strengths of both QKD and PQC to provide end-to-end encryption.

CO-LOCATED WITH **MPLS&SRV6AI**NET WORLD25 | SAME FORUM 2025

EANTC Multi-Vendor MPLS SDN Interoperability Test 2025

The Multi-Vendor MPLS & SDN Interoperability Test Event 2025 will cover multi-vendor interoperability of transport network services for cloud data centers and fixed and mobile networks. The testing will occur in Berlin from February 17 to February 28, 2025.

Test areas will include advanced EVPN enterprise service support, inter-domain connectivity solutions for data center interconnection (DCI), disaggregated Open RAN (O-RAN) fronthaul scenarios, 5G backhaul, end-to-end slicing, and Segment routing (SRv6). Traffic engineering and new FlexAlgo policies will also be covered, including opportunities to reduce energy consumption by intelligent traffic steering.

The test results will be published and presented live at the MPLS & SRv6 AI Net World Paris Congress from March 25 to 27, 2025. EANTC's showcase is a well-established event that benefits vendors and provides a unique ecosystem for fostering collaboration and innovation in the most advanced network scenarios. EANTC ensures a comprehensive testing environment tailored to service providers' needs.

REGISTER NOW !

DAY ONE **PLENARY SESSIONS** AUDITORIUM HAVANE

12.00 Registration & Finger Buffet

14.00 **TUTORIAL**

Chairman
Michael Baczyk, Director of Investment Advisory, Global Quantum Intelligence, LLC

14.00 **Network Security in a Post-Quantum World**
Educating the audience on the Quantum threat and various aspects of digital security that could be impacted.

- Understanding the threat to asymmetric cryptography and its impact to security, the need to act now and the need for crypto agility going forward.
- Discussing the fundamental threat to asymmetric cryptography and various aspects of security that could be impacted like – image (firmware, OS, etc.) signing, digital identities, cryptographic hardware identities, need for stronger hashing mechanisms, impact to TPMs, secure boot, the key derivation problem for transport protocols like MACsec/IPsec, etc.
- For each of the impacted areas, the path forward and what needs to be done to be quantum safe is presented.

Rakesh Kandula, Technical Marketing Engineer, Cisco

15.00 **KEYNOTE ADDRESS**

Martin Charbonneau, Head Quantum Enablement Network Infrastructure Business Group, Nokia

15.20 Coffee/Exhibition/Networking

16.00 **PANEL**

16.00 **What's Next for QKD, is it Just a Steppingstone to the Quantum-internet or will this be the Only Use Case?**

Moderator
Michael Baczyk, Director of Investment Advisory, Global Quantum Intelligence, LLC

Amirhossein Ghazisaeidi, Distinguished Member of Technical Staff, Nokia Bell Labs

Marc Hulzebos, DInnovation Officer, Eurofiber

Teun van der Veen, Senior Consultant, TNO

Anna Beata Kalisz Hedegaard, CEO and co-founder, Quantum Security Defence, QSECDE

17.00   End of the Conference Day One

18.15   Cocktail

09.00 QUANTUM NETWORKS ECOSYSTEM & INVESTMENT LANDSCAPE

Morning Chairman
Kevin Drury, VP, Strategic Initiatives PLM Optical Networks, Nokia

09.00 The Global Quantum Network Landscape: Progress, Challenges, and the Path Forward
Exploring significant developments across key regions, including China's extensive QKD network, Europe's EuroQCI project, and the rapidly expanding U.S. quantum networking clusters.

Michael Baczyk, Director of Investment Advisory, Global Quantum Intelligence, LLC

09.20 Building Quantum Internet with the Quantum Internet Alliance (QIA)
Sharing with the Quantum Internet Alliance (QIA) the status of its technical achievements in the field of quantum internet, use cases as well as showing the advancement being made towards the innovation and commercialization of this technology. Presenting its technology forum, the QIATF.

Vlora Rexhepi – van der Pol, Innovation Manager, Quantum Internet Alliance, TU Delft

09.40 A Pragmatic Perspective on the Development of Quantum-secured Optical Networks
Presenting a pragmatic perspective on the development of quantum-secured large-scale optical networks. The most critical challenge towards developing such networks is establishment of long-distance quantum channels.

Farzam Toudeh-Fallah,
Director Quantum Communications R&D,
Ciena

10.00 Monetizing Quantum-safe Solutions for Network Operators
Focusing on building a quantum-safe portfolio, pricing strategies, and how to position these services in a competitive market. By investing in quantum-safe networks today, network operators can not only future-proof their infrastructure but also differentiate themselves as leaders in the next era of secure connectivity.

Melchior Aelmans,
Quantum Bridge

10.20 Coffee/Exhibition/Networking

10.50 Helping Companies to Migrate to Quantum-Safe Security
Covering the various cryptographic tools required to counter the quantum threat comprise post-quantum cryptography, quantum random number generators and quantum key distribution. Showcasing how major companies around the world are already implementing them.

Jean-Robert Morax,
Quantum-safe Product Management Director,
ID Quantique

11.10 ENCRYPTION: WHAT'S NEXT?

11.10 Transitioning to Quantum Security for Network Operators
Discussing the transition path towards Quantum security for network operators. Based on the industry recommendations, certification requirements, etc. presenting the quantum transition path across Cisco's portfolio with a specific focus on service provider routing platforms.

Rakesh Kandula,
Technical Marketing Engineer, Cisco

11.30 Beyond QKD: the Next Step towards the Quantum Internet
What is needed to evolve current state of the art quantum networks (QKD) to the next level and potentially more use cases? What is the role for telecom providers?

Teun van der Veen,
Senior Consultant,
TNO

11.50 Quantum Networks: Ensuring Long-term Data Security
Providing enterprises and communication service providers with the knowledge and tools needed to embark on a quantum-safe journey. By modernizing their networks now, organizations can stay ahead of quantum threats and ensure long-term data security.

Paul Savill, Global Practice Leader of Networking and Edge Computing, Kyndryl

12.10 Finger Buffet

14.00 **IMPACT ON INFRASTRUCTURE**

Afternoon Chairman
Teun van der Veen,
Senior Consultant,
TNO

14.00 **Ensuring Quantum Safe for Data Communication Networks**

Introducing our practice and exploration in realizing quantum safe for data communication networks, including in the directions of PQC and QKD.

Wei Pan, Network Security Expert, Huawei

14.20 **From Point-to-point Quantum Key Distribution Systems to the Future Quantum Internet**

Discussing the transition from QKD systems to QCI and QI, and the technological status for each of them. Describing the current research efforts for QI.

Ludovic Noirie, Senior Researcher,
Nokia Bell Labs

14.40 **Quantum-Safe Connectivity: Enabling Secure Networks for the Future**

Highlighting the technical foundation of QSI, its market potential, and how strategic collaborations are driving innovation in the quantum-safe landscape.

Ettore Pulieri, Marketing & Product Manager,
Sparkle

15.00 **PhotonHub Europe: Empowering European Industry with Photonic Innovations**

Describing an EU-funded initiative aimed at accelerating the adoption of photonics technologies by European industries (mostly SMEs but not only).

Dr. Pierre-Yves Fonjallaz,
École Polytechnique Fédérale de Lausanne (EPFL)

15.20 Coffee/Exhibition/Networking

15.50 **STANDARDS AND POLICY**

15.50 **Quantum Security Standardization Landscape**

State-of-the art PQC (Post Quantum Cryptography) algorithms are a necessity now and not a question for the future. With the NIST (National Institute of Standards and Technology) standardization timelines, the migration era beginning, various government guidelines on Quantum Safe Cryptography, it has become a topic of utmost importance for standardization bodies like IETF/3GPP/O-RAN to adopt PQC standards.

Aritra Banerjee, Senior Research Scientist, Nokia

16.10 **Global, Quantum-Safe Networks Enabled by Satellite**

Describing the Concept of Operations and technology underpinning a satellite, or constellation of satellites, accounting for key-rate expectations and weather considerations, to show how terrestrial QKD systems, enhanced by satellite QKD systems, would establish interconnected secure quantum networks that can operate over global distances.

Alexander Pickston, Principal Physicis,
Honeywell

Andrew Csizmar, Sr. Manager Business Development,
Honeywel

16.30 **HYBRID MODELS**

16.30 **Hybrid Key Exchange and the Evolution of Secure Networks**

Exploring hybrid key exchange as a solution, combining the strengths of both QKD and PQC to provide end-to-end encryption and defense-in-depth against the vulnerabilities. Presenting a network architecture that employs hybrid QKD links alongside non-QKD hybrid links, enabling secure, long-distance communication through a fully meshed network.

Tony Rosati,
Vice President of Product Strategy and Business Development, evolutionQ

16.50 **Deploying Hybrid Quantum/classical Communication Systems for Smart Grid Data Protection**

Presenting the current collaboration between Stony Brook University (SBU), Brookhaven National Laboratory (BNL), the Calpine Power Company (CPC) and the Long Island Solar Farm (LISF), all located on Long Island, New York. The goal of the project is to demonstrate and validate a deployed hybrid quantum/classical cybersecurity optical network securing a network of power distribution nodes.

Authors: Eden Figueroa, Stony Brook University and Dimitrios Katramatos, Brookhaven National Laboratory

Eden Figueroa, Stony Brook University

17.10 End of the Conference

MPLS&SRV6AINET WORLD25 — QUANTUM NETWORKS SUMMIT 2025 — SASE FORUM 2025

ATTENDEES REGISTRATION

MPLS WORLD + QUANTUM NETWORKS DUAL PASS Including SASE Forum 2025	2,190 €
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SASE FORUM SINGLE PASS PASS Strategies for Securing Network Access	990 €
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At the event reception desk.

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circumstances may result in the substitution of a presentation topic or a speaker.

Delegate registration will be 100% refunded if the conference is cancelled by the organizer.

HOTEL INFORMATION & BOOKING

Our room blocks at a special rate are **sold out**.

Please find below a selection of neighboring hotels and booking platforms in order for you to find a hotel close to the Palais des Congrès.

The Palais des Congrès de Paris is situated in the 17th arrondissement of Paris (West) and is easily accessible by the ligne 1 of the Tube, and of course by cab or Uber.

Click on the pictures to access the online booking platforms
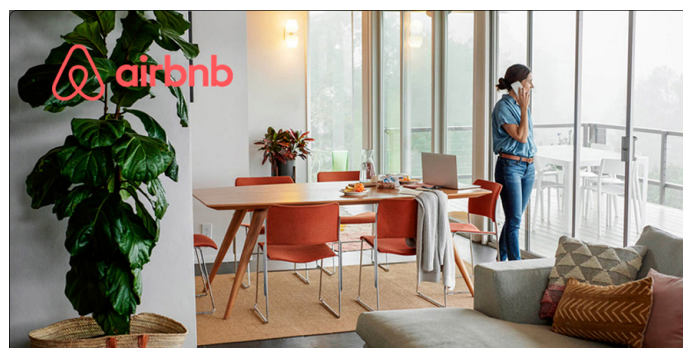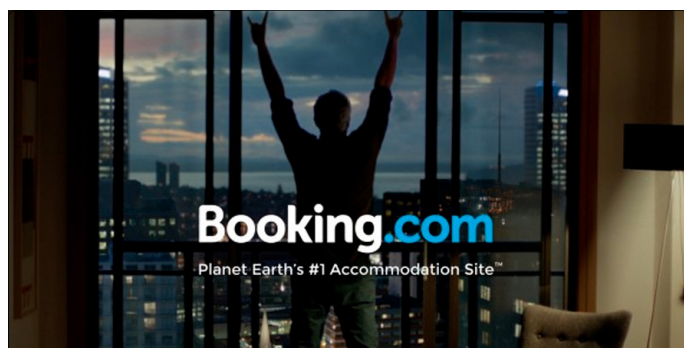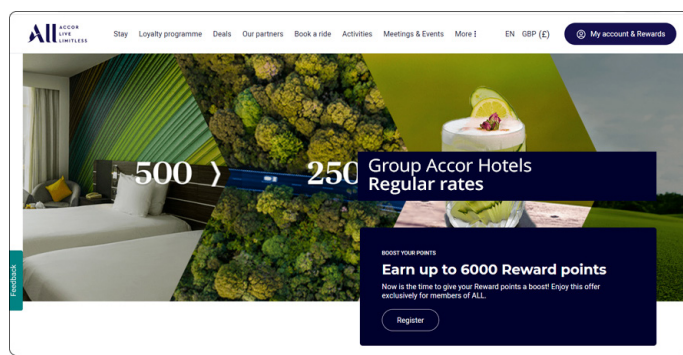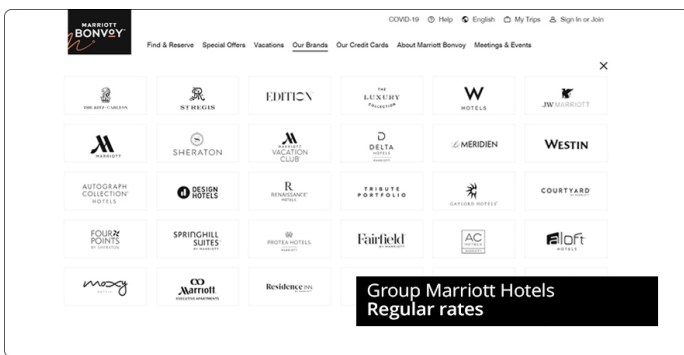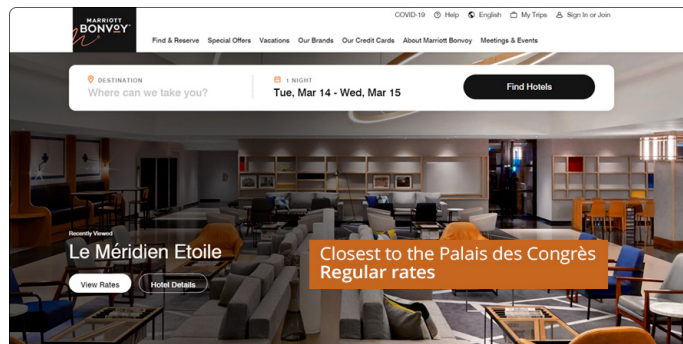
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From Roissy - Paris - Charles de Gaulle: Flat rate: € 56. From Orly: Flat rate: € 45
approximately 35 minutes to an hour, depending on traffic

Parking: Indigo Porte Maillot Car Park