



Press Release

Geneva, Switzerland, 07 January 2019

Quantum Alliance Initiative and ID Quantique aim for QRNG and QKD standardisation

The Hudson Institute's Quantum Alliance Initiative and ID Quantique are proud to announce a major breakthrough in the field of quantum information technology standards.

Today marks the submission of the first global Quantum Key Distribution (QKD) and Quantum Random Number Generator (QRNG) recommendations to the International Telecommunications Union — Telecommunication Standardization Section (ITU-T) meeting in Geneva, scheduled for January 22-30, 2019.

Lead by ID Quantique, these recommendations were reviewed and agreed to by a consortium of 18 companies and entities from eight countries, at a two-day conference held at Hudson Institute on December 6-7, 2018.

They will be adopted voluntarily as industry standards by the participating organisations and will now be presented to the ITU-T's Study Group 17, which coordinates security-related work across all of the ITU-T.

They are the first-ever standards for both QKD and QRNG, and the first to be approved by the leaders of the quantum communication industry. Both technologies will be crucial to the future of quantum communication, which is also the future of the Internet in the 21st century.

The signatories of the [recommendation letters](#) include Armafex Partners LLC, Bra-ket Science, BrightApps LLC, Cambridge Quantum Computing, Ciena, Florida Atlantic University, Harris Corp, Hudson Institute, Institute for National Defense & Security Research, MagiQ Technologies, Quantum Xchange, Qubitekk, Quintessence Labs, Rivada Networks, SK Telecom, SPAWAR Systems Center Pacific, University of Warsaw, and ID Quantique.

The recommendation letters read in part: "In full awareness of the urgency to act, we the undersigned [...] call on the security community to establish recommendations appropriate to quantum entropy sources and Quantum Key Distribution, which these standards are designed to promote."

Submission of the standards was agreed to as approved work items at the last meeting of the SG17 in September 2018, and participants and organisers of the December conference are optimistic about the standards' chances for final approval.

"In an era where more data flows than ever before and where everything in the real world is interconnected, quantum communications technologies will play a significant role in securing our data and communications. This is an excellent step towards wide scale adoption of these critical technologies," says Grégoire Ribordy, CEO and co-founder at ID Quantique.

"This has been a big success for the Quantum Alliance Initiative and its members," says Dr. Arthur Herman, New York Times Bestselling author, Pulitzer Prize Finalist historian, and Director of the QAI, "and a big advance for quantum information technology. The goal of these standards is not to preclude or compete with standards being completed by other standards bodies, like ETSI or IEEE, but to complement those standards with a foundational 1.0 version that current users can adopt while waiting for future standards development."

About Hudson Institute

Hudson Institute is a research organization promoting American leadership and global engagement for a secure, free, and prosperous future.

Founded in 1961 by strategist Herman Kahn, Hudson Institute challenges conventional thinking and helps manage strategic transitions to the future through interdisciplinary studies in defense, international relations, economics, health care, technology, culture, and law.

Hudson seeks to guide public policy makers and global leaders in government and business through a vigorous program of publications, conferences, policy briefings and recommendations.

For more information, please click [here](#).

About ID Quantique

Founded in 2001 as a spin-off of the Group of Applied Physics of the University of Geneva, ID Quantique is the world leader in quantum-safe crypto solutions, designed to protect data for the future. The company provides quantum-safe network encryption, secure quantum key generation and Quantum Key Distribution solutions and services to the financial industry, enterprises and government organisations globally. IDQ's quantum random number generator has been validated according to global standards and independent agencies, and is the reference in highly regulated and mission critical industries – such as security, encryption, critical infrastructure and IoT – where trust is paramount.

Additionally, IDQ is a leading provider of optical instrumentation products, most notably photon counters and related electronics. The company's innovative photonic solutions are used in both commercial and research applications.

IDQ's products are used by government, enterprise and academic customers in more than 60 countries and on every continent. IDQ is proud of its independence and neutrality, and believes in establishing long-term and trusted relationships with its customers and partners.

For more information, please visit www.idquantique.com.