

## CryptoNext Security and Quandela announce business partnership to offer an integrated security solution

**Paris, March 9<sup>th</sup>, 2023, CryptoNext Security and Quandela join forces to offer an integrated solution that will secure the implementation of post-quantum communication protocols.**

Quandela, a key player in photonic quantum computing, builds full-stack optical quantum computers (MosaiQ) that are now available on cloud and on-premises. After years of development, Quandela proposes now a patented protocol (Entropy) to generate quantum certified random numbers using a two-qubit Quantum Processing Unit (QPU) achieving highest purity for cryptographic key generation.

CryptoNext Security, a global leader and pioneer in next generation Post-Quantum Cryptography (PQC), offers its Quantum Safe Remediation Software Suite (C-QSR), based on its Quantum Safe Library (C-QSL), along with a large variety of integration tools and application plugins for multiple use cases. In December 2022, France ministry of Europe and Foreign Affairs (MEAE) succeeded in sending its first quantum safe diplomatic telegram, thanks to CryptoNext technology.

Leveraging their unique technologies and know-how in quantum computing and post-quantum cryptography remediation, Quandela and CryptoNext Security develop a fully integrated quantum safe solution to secure transfer of sensitive data today and in the future. This practically associate certified entropy generation leveraging Quantum Processing Unit (QPU), post-processing, key generation, and the appropriate Quantum Safe Integration Tools and Application Plugins depending on the use case.

Almost all IT/OT systems and applications will have to face the upcoming quantum threat while it will be a must to leverage Quantum Computing technology breakthrough. Applications encompass secured communications, networks, messaging, code signing, IoT, identity, digital signature, blockchain, and a multitude of vertical applications for key customers in Defense, Finance, Manufacturing, Energy, Automotive, Digital Services, to name a few.

Valérian Giesz, co-founder and CEO of Quandela declared: *“We are very excited about this partnership with CryptoNext Security. Joining forces together, we are demonstrating new and unexplored uses, including how quantum will improve the security of our communications. With our MosaiQ and Entropy products, we are willing*

*to contribute to the highest security level expected from a combined Cryptonext Security-Quandela solution”*

Florent Grosmaître, CEO of CryptoNext Security insisted that *“CryptoNext is proud to team with Quandela in order to benefit from its leading technology in quantum number generation, to deliver an ever more secured end-to-end post-quantum cryptography processing. Combining our forces with Quandela will bring our customers and partners the best of both, i.e. the disruptive computing capacity of quantum computer and protection against misuse of such technology”*.

#### **About Quandela**

Quandela, leader in quantum photonics, develops full-stack optical quantum computers, available both on [cloud](#) and on-premises.

Quandela is a complete player in photonic quantum computing and currently employs more than fifty doctors and engineers in algorithms, semiconductors, quantum optics, quantum information and computer science. In 2022, Quandela released its photonic computer programming and simulation software, Perceval, and signed a hosting partnership with OVHcloud to strengthen the user community. Today, the company offers a cybersecurity enhancement solution with a 2-qubit processor and made its first 6-qubit NISQ quantum computer available in the cloud in the fall of 2022. Quandela also supports and advises companies and organizations, such as EDF, MBDA and ONERA, in the exploration and development of the first use cases.

#### **About CryptoNext Security**

CryptoNext, founded 2019 after 20 years+ of post-quantum cryptographic research, offers its Quantum Safe Remediation Software Suite (C-QSR), agile by design and tuned for optimal performance, it includes NIST and European Agencies standard PQC algorithms, as well as those related to hybridization of protocols and certificates. C-QSR includes a full set of post-quantum integration tools and application plug-ins for legacy/business applications, secured messaging, HSM, VPN, PKI, Digital signature and certificates, IoT, Blockchain and more.

Selected by US National Cybersecurity Center of Excellence (NCCoE) for the “Migration to Post-Quantum Cryptography” project and mentioned by Gartner among 5 top PQC leaders, CryptoNext partners with its customers in their PQ migration for long-term effectiveness.

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