



ETSI/IQC Quantum Safe Cryptography Conference 2026

From Canadian testbed to global operations

Presented by: Bernard Duval - CEO

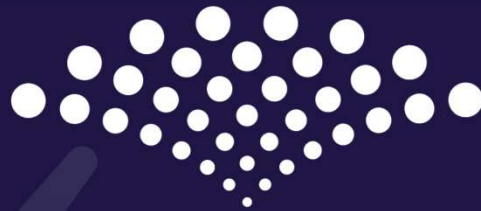


17/06/2026

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NUMANA



NUMANA

Macro-accélérateur en technologies et modèles émergents

Macro-accelerator in emerging technologies and models

Avec l'appui de nos partenaires publics
With the support of our public partners



Government
of Canada

Gouvernement
du Canada



Notre grand projet en communication quantique

Our major quantum communication project

The Kirq logo is centered on a dark blue background with glowing light trails and stars. It consists of a stylized white and teal arrow pointing right, followed by the word "Kirq" in a bold, italicized white font. Above "Kirq" is the text "QUANTUM COMMUNICATION TESTBED" in a smaller, teal, italicized font. Below "Kirq" is the text "BANC D'ESSAI DE COMMUNICATION QUANTIQUE" in a smaller, teal, italicized font.

*QUANTUM
COMMUNICATION
TESTBED*

Kirq

*BANC D'ESSAI
DE COMMUNICATION
QUANTIQUE*

Le seul banc d'essai en communication quantique au Canada
The only quantum communication testbed in Canada



- Une infrastructure multipôle,
- classique et quantique déployée
- 240 km de liens dédiés de fibre optique
- + de 25 partenaires et collaborateurs
- + de 10 projets en cours



Québec 2025



Montréal 2025



Sherbrooke 2024

- Multi-node infrastructure
- Classical & quantum, deployed
- 240 km of dedicated optical-fiber links
- 25 + partners and collaborators
- 10 + projects underway

Kirq - Four Guiding Principles

The background features a dynamic, abstract design with swirling, colorful light streaks in shades of blue, purple, and orange, creating a sense of motion and energy.

Open
Scalable
Adaptable
Collaborative

Kirq - Available to the Ecosystem

- Independent testbed open to all ecosystem stakeholders
 - ✓ Technology developers and suppliers
 - ✓ Early technology adopters
 - ✓ From start-ups to large organizations
 - ✓ Research institutes and academia
 - ✓ Government agencies
- Accessible to local and international users

The logo features a stylized 'K' with a blue arrow pointing right, followed by the word 'Mission' in a bold, orange, italicized sans-serif font.

K Mission

Promote and accelerate the development and adoption of Quantum Communication technologies and systems by providing access to a real-world testbed

Objectives

- Accelerate the development of products and services
- Accelerate the adoption of Quantum Communication solutions
- Develop highly qualified personnel
- Attract international investment

NOKIA

TOSHIBA

ciena

Bell

Honeywell

TELUS

evolution

|KETS>

CRYPTO4A

IDQ

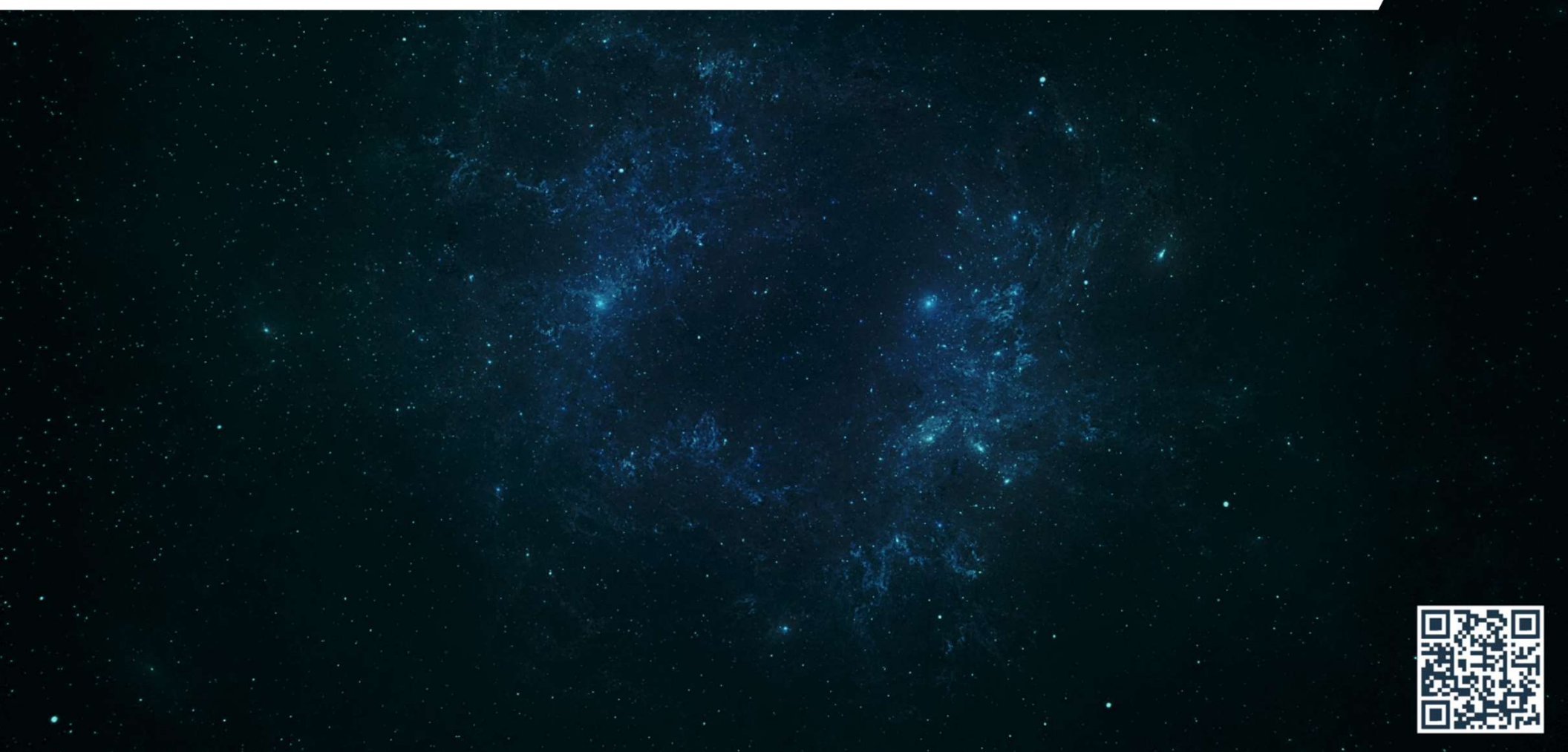
QLOK
Quantum Safe

KPMG

quantumemotion

nowquantum

Kirq – Global Partnerships





Nos secteurs prioritaires en communication quantique

Priority sectors we cover in quantum communication



Énergie / Energy



Sécurité nationale
National security



Infrastructures critiques
Critical infrastructure



Santé / Health

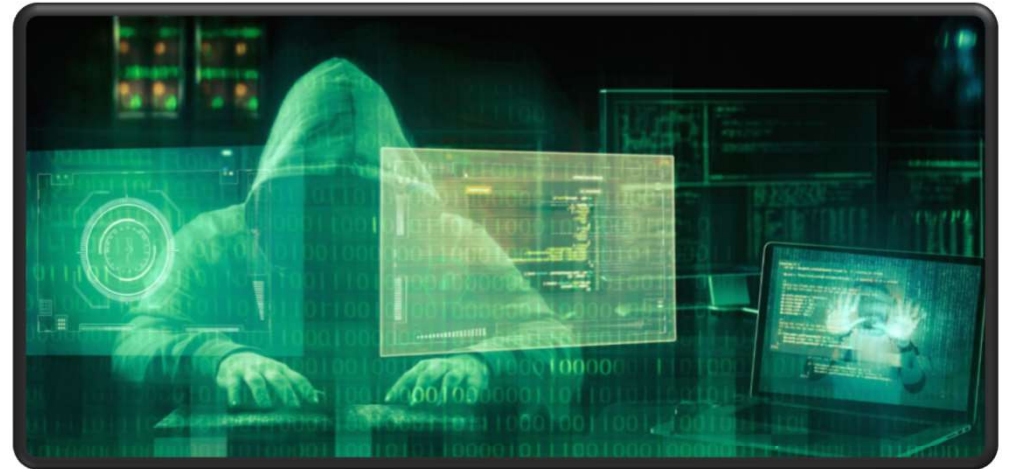


Télécommunications



Finance

Pourquoi c'est important **Why it matters**

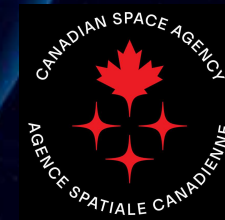


Menace et opportunités des ordinateurs et du calcul quantique et l'IA
Quantum Computing and AI threats & Opportunities

Institutions stratégiques en sécurité et réglementation Strategic Institutions in Security and Regulation



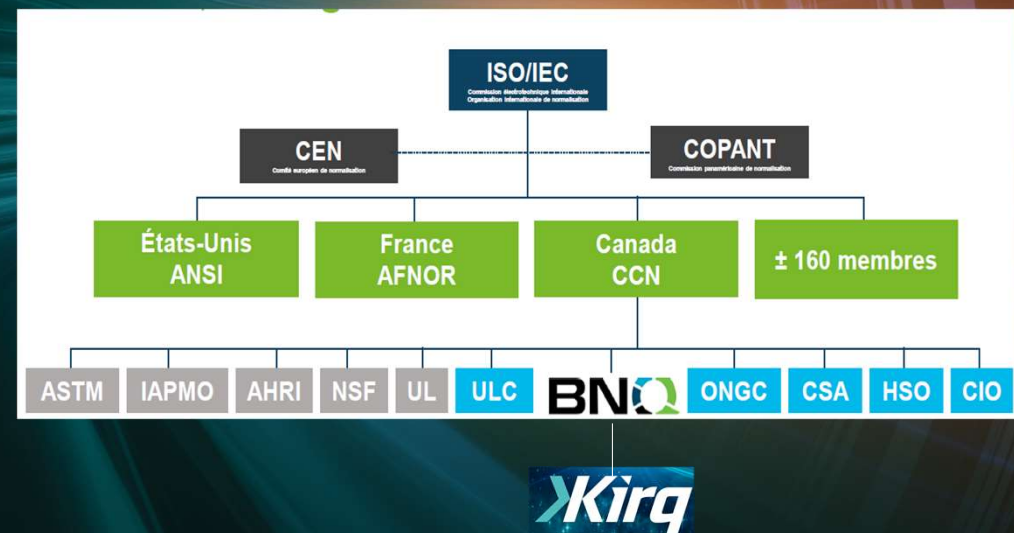
- TQC Member since 2025. NATO's Transatlantic Quantum Community
- Candidate for multiple DISH-DRDC
- National research council 2026
- Canadian Space Agency 2026
- Canadian ISO/IEC JTC 3 committee with Europe



Numana activities in standardization

➤ Standardization

- ✓ Bureau des normes du Québec
- ✓ ISO/JTC 3 : Quantum tech.
- ✓ BNQ: Canadian mandate
- ✓ Numana: Quebec awareness and mobilization mandate



Toronto, Canada, February 24, 2026

Nokia, Numana and partners validate quantum-safe network Blueprint 7 to secure Canada's critical infrastructure

Press Release

- Tests demonstrate how trusted Canadian solutions will help keep Canada on the leading edge of quantum development

Quantum computers – already a reality and advancing toward broader commercial availability – will be able to compromise widely used network security almost instantly. At Canada's only quantum-safe testbed, Kirq, Numana and Nokia have had a breakthrough, successfully testing a blueprint that can be used to strengthen Canada's long-term digital security and critical infrastructure, including networks used by banks, hospitals and governments. This milestone showcases Canadian excellence in quantum innovation and reinforces the country's ability to lead in securing next-generation digital systems.

Through interoperability testing on the Kirq platform, the teams validated practical, repeatable network architectures showing that multiple next-generation encryption technologies can operate together within a unified system. This is a critical step

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Vision





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THANK YOU / MERCI

