

# Resilient Healthcare and AI for National Defense

Cybersecurity and defense are now critical priorities across all sectors.

Healthcare and rescue systems must remain operational offline during disasters while ensuring secure, verifiable data exchange.

SOSCHAIN will enable professionals across healthcare, pharmacy, insurance, emergency and rescue services to operate securely and efficiently in any scenery.



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Proposal Consortium European



# The Critical Need for Healthcare Resilience

## Healthcare Infrastructure

Critical national security component requiring offline capabilities



## Connected Systems

Insurance, pharmacy, healthcare and emergency services can link and exchange data securely via the individual's Unified Health ID.



## Legal Documentation

Consents, identity verification, birth and death certificates must remain accessible



## Technology Foundation

W3C-compliant decentralized identity, blockchain traceability, and post-quantum cryptography



# Unified Health ID: The Core Technology

## Patented Unified Health ID



Individuals authorize a SOSCHAIN service provider to link their healthcare, insurance, and identity documents into a Unified Health Index.

## Device Integration



Updates from wearables, pharmacies, healthcare and insurance providers.

## Online/Offline Resilience



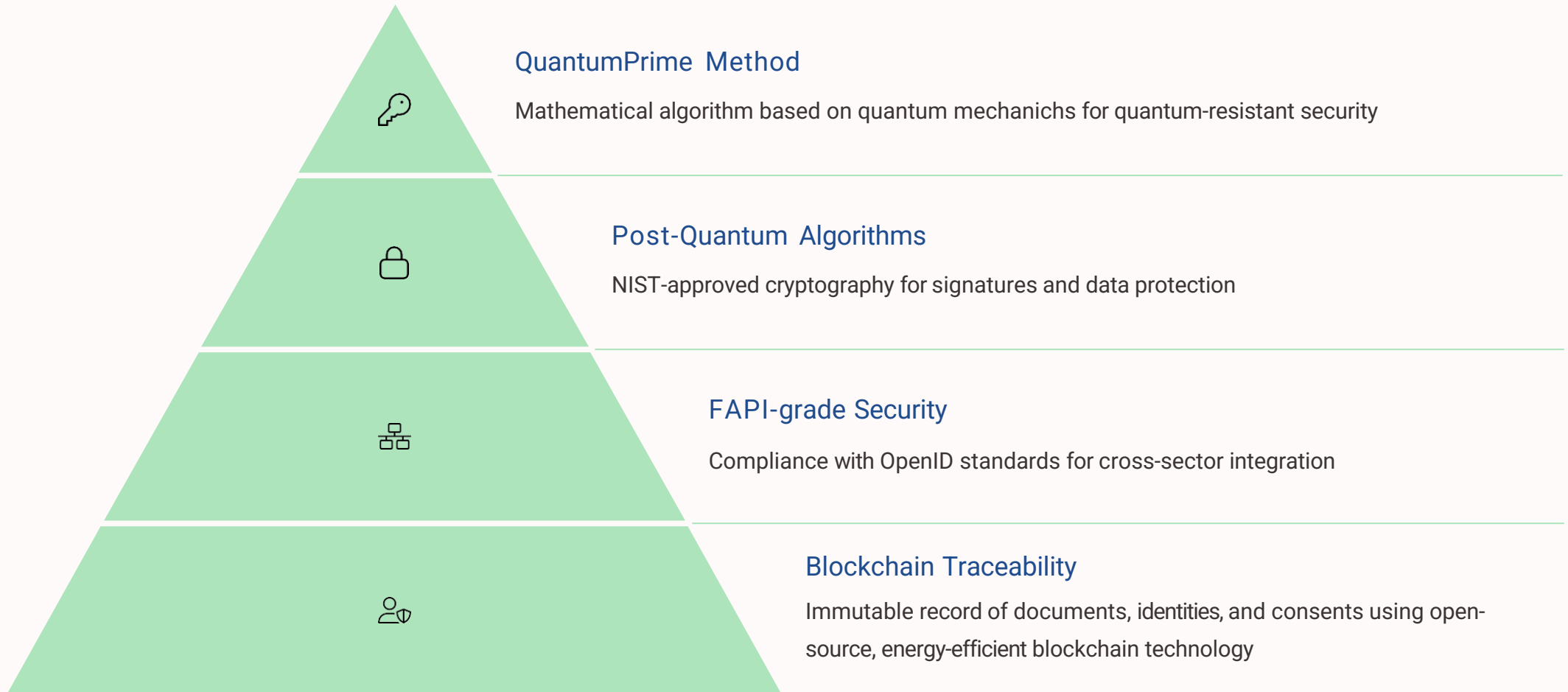
Continue generating and exchanging data securely even without a server connection. Synchronization occurs once connectivity is restored.

## Consent-Based Permissions



Consent-based access control, traceable via blockchain, ensures transparent and tamper-proof data governance.

# Advanced Cybersecurity Mechanisms



# The Future: SOSCHAIN Emergency Kit



## Dual-Mode Wallet

Secure data sharing in online / offline conditions with post-quantum encryption.



## Quantum-Resistant VPN

Secure communications for resilient data exchange.



## Edge Servers

Low-energy units with confidential storage supporting open-source databases.



## Resilient Connectivity

Support for satellite, Wi-Fi, LoRa (UHF), and self-healing mesh network powered by drones.



## Localization and Rescue

Bluetooth devices can advertise the clinical condition of individuals to be located by drones and rescue teams.



## Triage & Mission Planning Tools

Personalized AI can be used for clinical recommendations and strategic rescue planning via digital twin-based triage scoring.



# Technologies for Disasters and Rescue Operations



## Locatable Multi-ID Devices

Wearable technology with anti-tracking capabilities.

Enables emergency identification and digital twin retrieval.

## Rescue Drones (UAVs)

Locating individuals, collecting triage data, relaying information and delivering medical supplies.

## Energy Autonomy Solutions

Uninterruptible Power Supply (UPS) and foldable solar panels enable off-grid, renewable energy generation for continuous field operations.



# Intelligent Support Systems

## AI and Digital Twins

High-quality data for to deliver recommendations based on digital twins.

## Mission Planning

Individuals or vehicles can be located via GPS, while Bluetooth signals broadcast digital twin updates, including vital signs.

## Resilient Communications

Enables offline functionality in no-coverage scenarios, ensuring uninterrupted operations in critical services.



# Securing Our Future Together

## Post-Quantum Security

Protection against current and emerging threats

## Privacy Preservation

Protects confidential data while enabling secure, life-saving interventions.



## Seamless Integration

Compatible with existing systems, enabling secure data exchange and next-generation capabilities

## Rapid Response

Accelerates deployment of critical infrastructure in emergency and rescue scenarios.

SOSCHAIN is a comprehensive solution for defense and healthcare resilience.

Partner with us to deploy secure, mission-critical infrastructure and save lives.