



the Future of Memory and Storage

SNIA Security

Eric Hibbard, CISSP-ISSAP, FIP, CIPP/US, CISA

Chair, SNIA Security TWG

Samsung Semiconductor, Inc.

Abstract



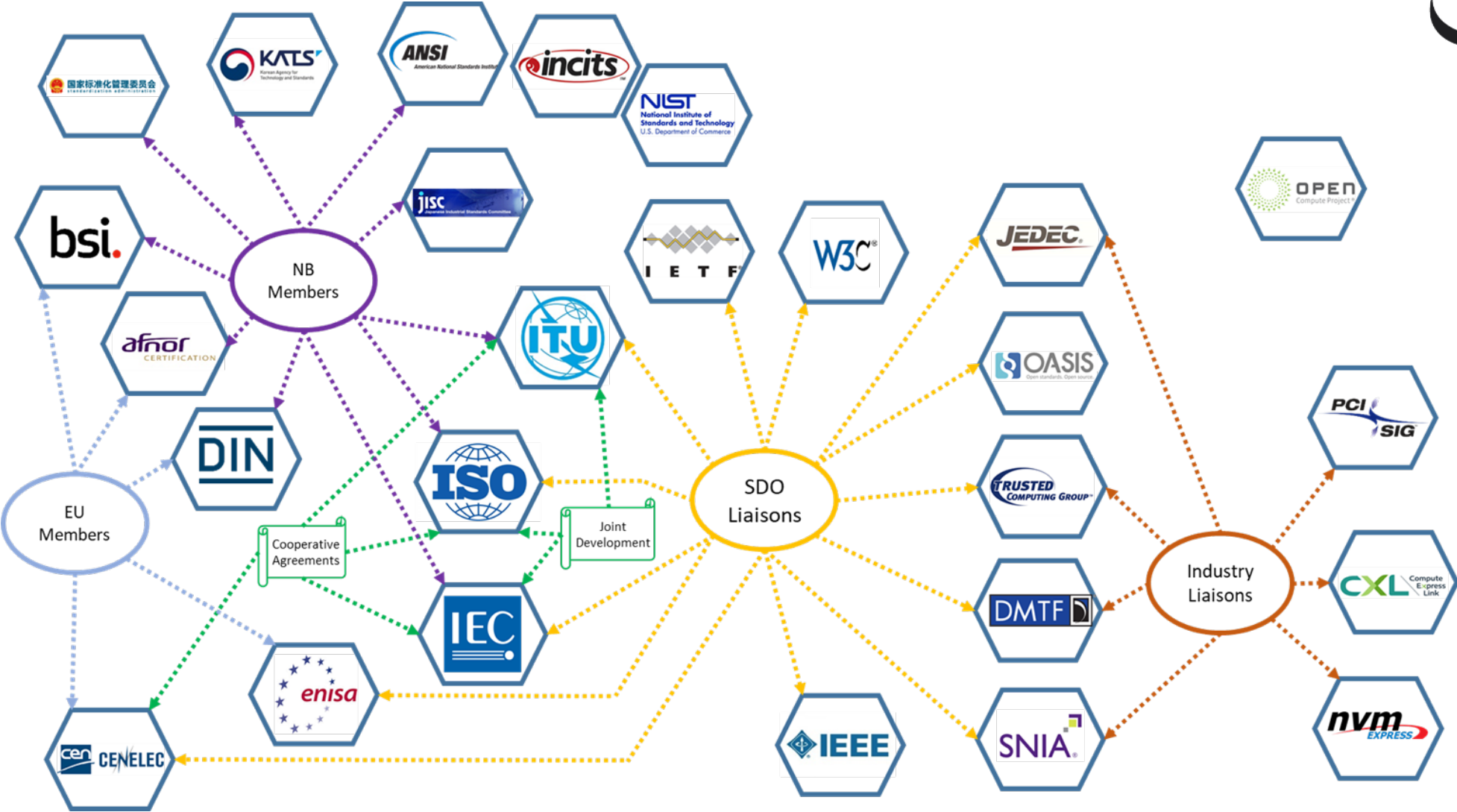
Security, privacy, protection - some of the most critical areas of concern when it comes to data, storage and data transport. There are a myriad of challenges to keeping not only the data, but the compute and storage ecosystem protected and secure, and more on the horizon. Learn where SNIA contributes to developing standards-based solutions, both directly and with its partners, to help address security concerns for today's and tomorrow's ecosystems.

Security & Privacy Threat Landscape



- Active adversaries (nation states, organized crime, etc.)
- Novel attacks (hybrid ransomware, custom malware)
- Supply chain insecurities
- Expanded attack surface (cloud, remote workforce, managed services)
- Insider threats
- Poor cyber hygiene (unpatched systems, vulnerable protocols)
- Social engineering (AI deepfakes)
- Plethora of legal, statutory, regulatory, and contractual obligations

Storage Security Standards Landscape



Recent SNIA Security & Privacy Activities



- Published *SNIA Storage Security: Encryption & Key Management* paper
- Published *SNIA Storage Security: Fibre Channel Security* paper
- Published ISO/IEC PAS 20648:2024
- Published *SNIA TLS Specification for Storage Systems v2.2*
- Drafting *SNIA Data Protection Best Practices* paper
- Key contributor to ISO/IEC 27040:2024 (Storage security) standard
- Contributor to IEEE 2883 (Storage sanitization) series
- Security presentations at industry conferences (SDC, CMS Summit)
- Liaisons with ISO, INCITS, IEEE, FCIA, American Bar Association, Cloud Security Alliance, Trusted Computing Group

SNIA Radar - Security



- Platform security
- Quantum-resistant cryptography
- Weaponized artificial intelligence
- Data security versus system security
- Zero trust security
- Security and sustainability

- European Cybersecurity Act – product security certification

- The next “Black Swan” event

SNIA Radar - Privacy



- Privacy-preserving computation techniques (homomorphic encryption, trusted execution environments)
- Artificial intelligence and data protect/privacy
- Privacy regulations (EU GDPR, CCPA/CCRA, CN PIPL) – United Nations projects that 137 out of 194 countries have data protection and privacy legislation
- The next major data breach



**Thank
You**