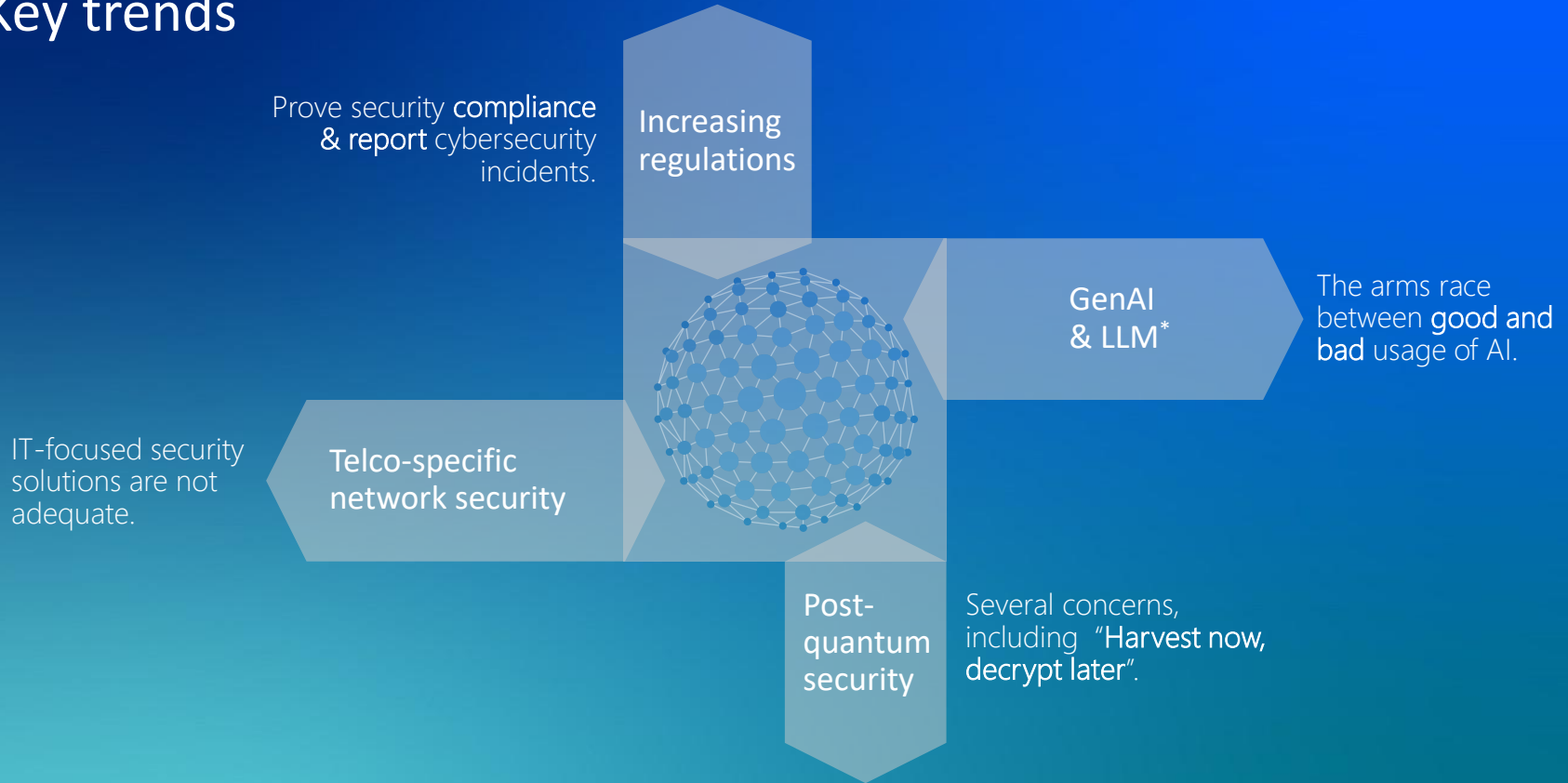


# Securing Critical Network Infrastructures



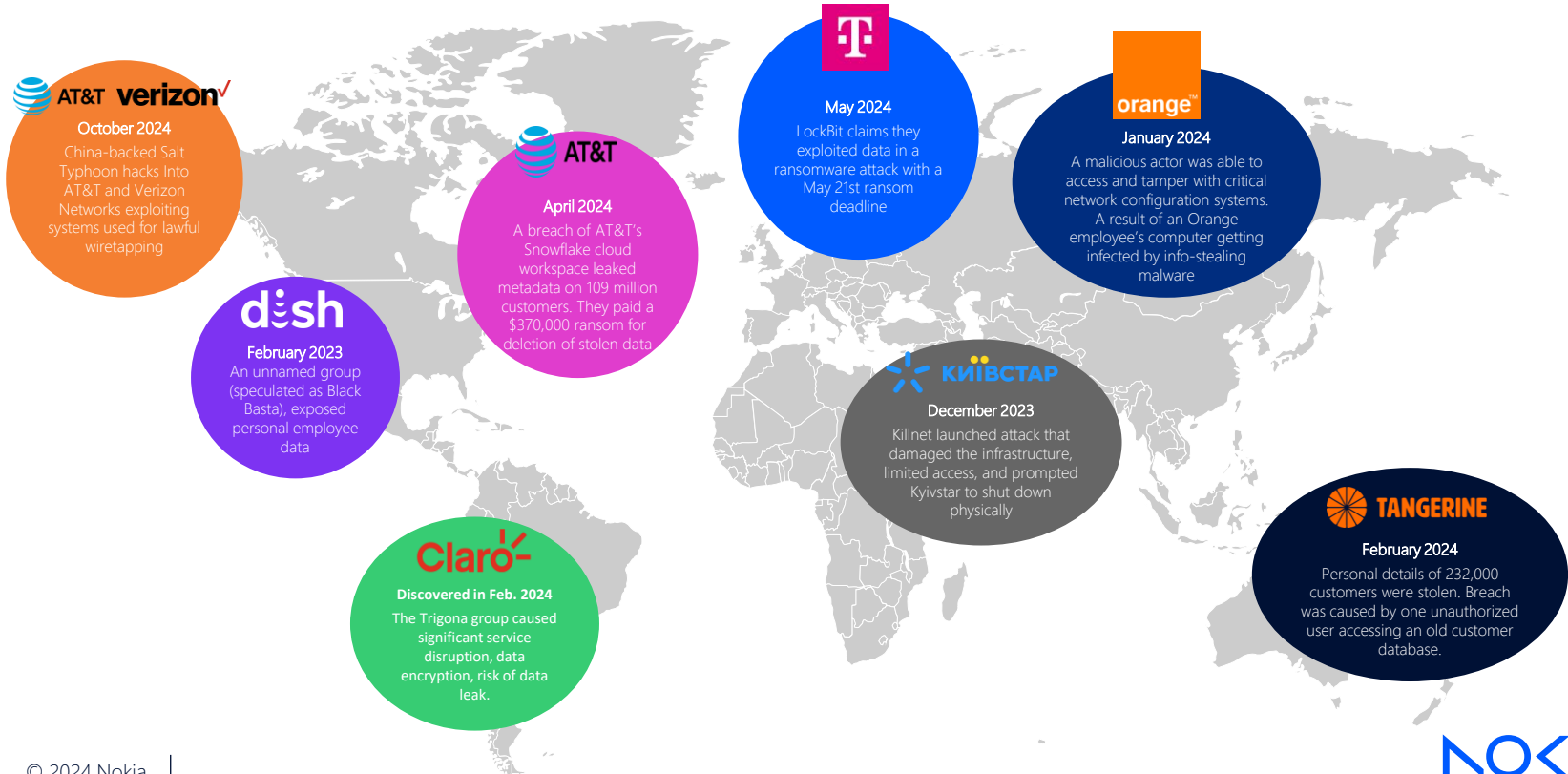
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# Key trends



\*) Large Language Models

# A fresh perspective on the telecom cyber battleground 2023-2024



# Specialized Telecom centric portfolio

Not generic IT



## IT security

## Telecom network security

### What's top of mind – security priorities

Avoid data thefts, ransomware, PII, etc.

Operational continuity of voice/data networks.

### Components

Industry agnostic such as laptops, Mobile Devices, Intranet, IT application and data center

Purpose-built networks such as Core, RAN, Transport, Access Network, OSS/ BSS

### Infrastructure & protocols

Standard protocols like TCP/IP and TLS

Multi-vendor legacy technologies mixed with latest cloud-based SBA and telco protocols like SS7, Diameter, GTP

### Skill sets

Skills in endpoint security (mobile, desktop servers), app security, firewalls, and secure gateways.

Expertise in telco network topology, communication protocols, attack scenarios for SBA, NE integrations to collect telemetry data and take actions.

### Tools and technology

Homogenous security tools like IT SIEM, IAM, EDR, and laptop antivirus.

Specialized tools like telco XDR, mission critical EDR, telco PAM, cloud-native architecture

### Regulatory landscape

Governed by standards like HIPAA, PCI, and GDPR

Abides by 3GPP, GSMA, and country specific regulations such as TSA in the UK, NIS2 in Europe

# Regulatory response to disruption and uncertainty in trends



House of Commons of Canada introduced **Bill C-26, an Act Respecting Cyber Security**.



**EU NIS2** regulation to enhance cybersecurity



- Executive Order (EO)14028: Improving the Nation's Cybersecurity
- NIST Cyber Security Framework, CSF



**TSA (Telecom Security Act)** regulation to protect UK telecoms against cyber attacks.



2022 **Cybersecurity Policy for Critical Infrastructure Protection (CPCIP)**, and a revised National Security Strategy (**NSS**).



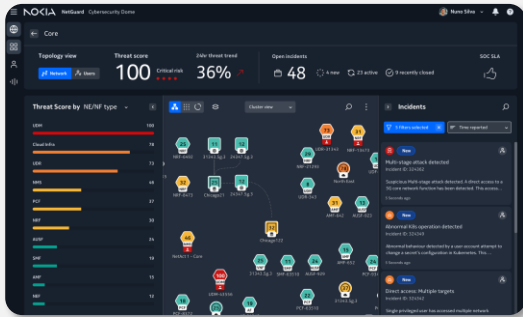
(CERT-In) released new cybersecurity directives to gov. and private agencies



Requirements split between the **SOCI Act** and **Telecommunications Act 1997 (Cth)**

# Nokia Security capabilities

## Cybersecurity Dome



- Transport, Core, Radio
- PAM
- Threat Intelligence
- Endpoints
- Security tools



### Identity and Access Management

Implement access controls to ensure least privileged access to key operational systems across IT and OT



### Audit Compliance Manager

Automatically audit configurations of network entities for compliance with golden configuration



### Certificate / Lifecycle Manager

Deploy 100M+ PKI certificates. Automate certificate enrollment and deployment, discovery, and audit



### Endpoint Security

EDR – Monitor core network functions  
NDR – Analyze network traffic to detect Malware and network attacks



### Security Consulting & Professional Services

Evaluate the risks and prioritize the security controls  
Services for integrations / configurations

# CSPs around the world choosing Nokia Security



Bell



TELE2



Charter  
COMMUNICATIONS

dish



Telefonica

bharti



TIM



OPTUS



Rakuten



Claro



stc

zain



NOKIA

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