Digital transformation for future-ready security

Nokia Cloud and Network Services
Security Consulting

As networks become more diversified and complex, so do the threats they face. How can you seize the opportunities to create innovative services and open ecosystems while keeping your data private and your infrastructure secure?

Nokia Cloud and Network Services Security Consulting brings deep global telecoms expertise and one of the world's only end-to-end security infrastructures to help you transform your security operations and stay ahead of potential threats.

Protecting a critical, open network

The value of the network lies in the services it can deliver. With the advent of the 5G era, those services are going to be more advanced, fluid and dynamic than ever before — often co-developed with third-party partners and continuously evolving in pace with customer needs.

That unprecedented flexibility and openness will see massive numbers of connected devices and applications, erasing the traditional network perimeter. If current security requirements are hard enough to meet, the coming years will bring a whole new level of complexity.

For effective security that can handle any degree of network complexity, you need:

- **Integration** — so all your tools, safeguards and data feeds work together seamlessly.
- **Speed** — to cut the time incidents go undetected and safeguards get updated.
- **Adaptability** — to respond quickly to evolving and increasingly sophisticated attacks.
- **Automation** — to ease the mounting workload on security teams by offloading recurring incident validation and routine tasks.

Nokia Cloud and Network Services Security Consulting brings the know-how you need to deliver rock-solid security and privacy for sensitive business data, critical infrastructure and all other aspects of your network.
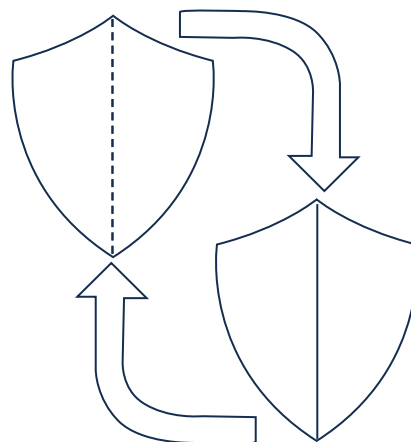
IoT devices experience an average of 5,200 attacks per month — a volume that's humanly impossible to keep up with as the IoT grows.[1]

Symantec, 2019. ISTR Internet Security Threat Report Volume 24. https://docs.broadcom.com/doc/istr-24-2019-en.

Manage cyber threats with confidence

Nokia Cloud and Network Services Security Consulting

End-to-end security

Our experience helping hundreds of communications service providers (CSPs) transform their risk management, security concepts and security operations has given the Nokia Cloud and Network Services Security Consulting team deep insight into what's needed, what works, and how to get results. In addition to a rigorous, proven methodology for critical network security transformation, we're a trusted partner of CSPs worldwide and one of just two companies in the world with in-house end-to-end 5G security infrastructure.

Nokia Cloud and Network Services Security Consulting services include:

- **Security assessment:**
  A complete risk assessment, security scan, architecture review and compliance audit process specific to the threat profile of your technology and market.

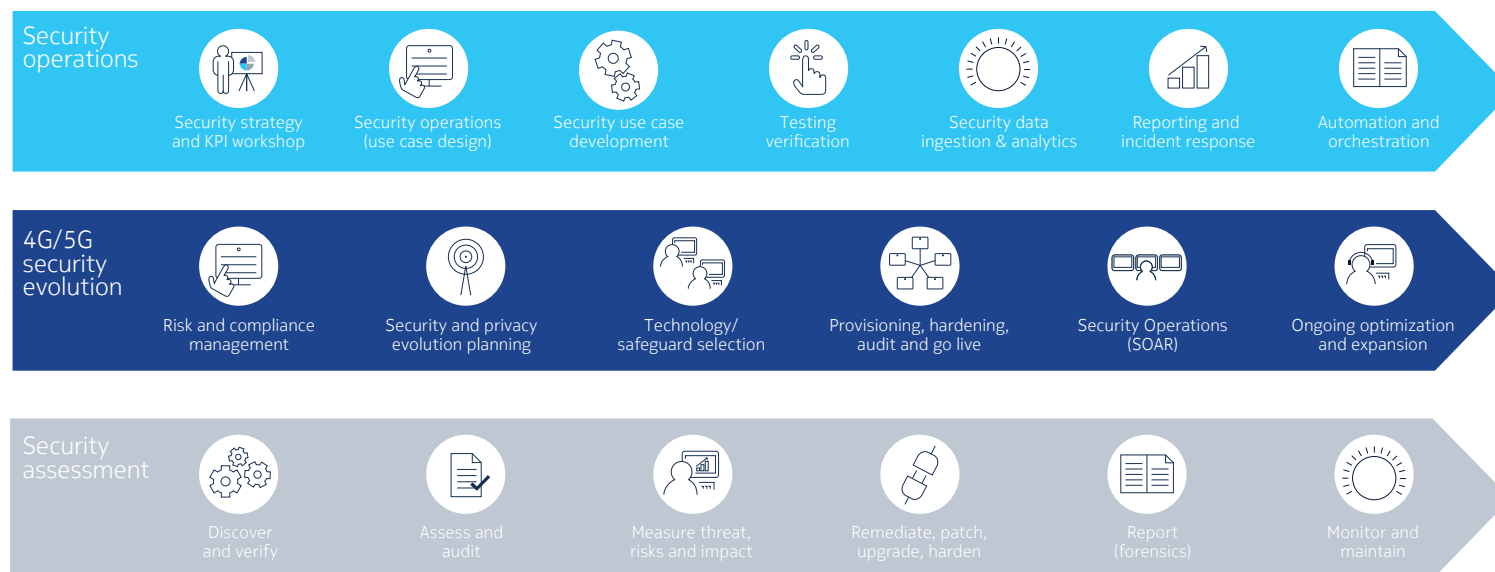- **4G/5G security evolution:**
  Recommendations to bridge the gaps between your current and desired future state based on our assessment and our Unified Compliance Framework.

- **Security operations:**
  End-to-end security operations with an advanced response architecture for rapid, accurate security insights and responses across all your endpoints, networks, cloud services and users.

A proven methodology

Nokia Cloud and Network Services Security Consulting applies a proven methodology supported by industry best practices:

Security operations

| Security strategy and KPI workshop | Security operations (use case design) | Security use case development | Testing verification | Security data ingestion & analytics | Reporting and incident response | Automation and orchestration |

4G/5G security evolution

| Risk and compliance management | Security and privacy evolution planning | Technology/ safeguard selection | Provisioning, hardening, audit and go live | Security Operations (SOAR) | Ongoing optimization and expansion |

Security assessment

| Discover and verify | Assess and audit | Measure threat, risks and impact | Remediate, patch, upgrade, harden | Report (forensics) | Monitor and maintain |

Security assessment consulting

To improve your security posture, you have to start by understanding your current state. Is your technology up to date? Are your processes and policies as effective as they should be? Where are the gaps or weaknesses that could leave you vulnerable? We help you establish your baseline with:

Security process assessment
We give you comprehensive insight into the maturity of your processes based on industry best practices, recognized standards and regulations including ISO/IEC 27001, ITU-T X.805, eTOM and NIST CSF.

Vulnerability assessment
Our team of experts can identify specific technical security gaps and provide recommendations to bridge them effectively.

Benefits

- Understand how your processes and technology work together to manage your security landscape.
- Improve compliance with regulations with the help of our risk-based approach.
- Determine the most effective way to close identified security gaps.
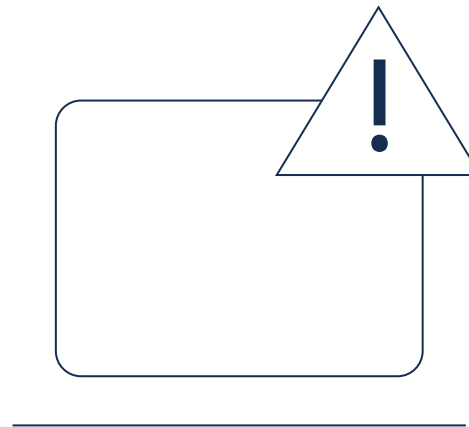
Post-incident assessment

One of the most common times CSPs want to do a security assessment is after they've had an incident. They want to know what they could have done differently and if they need to upgrade their technology to prevent a similar incident from happening again. Our team can conduct a complete review of your technology — and how you use it — to help you make the right decisions moving forward.

4G/5G security transformation

The cloud, software-defined networks (SDNs) and 5G evolution all demand a shift in security operations — especially the use of automation to support new use cases and ensure security doesn't bottleneck service delivery. Based on our security assessment and your goals, our team will recommend a cybersecurity roadmap tailored to your business to take your security architecture to the next level. Choose an end-to-end transformation package or individual modules such as 5G core security transformation consulting or consulting for Shared Data Layer security.

5G security transformation consulting
We provide you with a holistic understanding of potential cybersecurity risks and the strategies that will help you achieve your operational objectives.

5G privacy consulting
We'll help ensure your security infrastructure complies with the European Union's General Data Protection Regulation and other key privacy requirements.

Benefits

- Invest in the right technologies at the right time for the greatest security improvements.
- Gain greater flexibility with modern, dynamic security solutions that keep you on top of the ever-changing threat landscape.
- Build customer and regulator trust in your 5G rollouts.
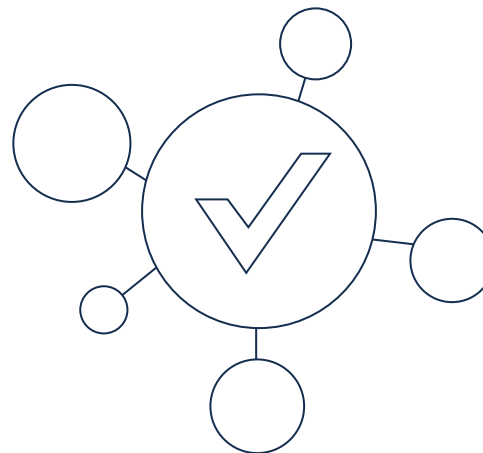
Building security into deployment plans

CSPs looking to roll out new 5G services often start with pilot projects before transitioning to full deployment. Those pilots seldom have to account for end-to-end security — which can create gaps when it's time to advance to full deployment. Our team can advise you on how to build flexible, scalable security measures into your rollout plans from the very beginning to make full-scale deployment as seamless and secure as possible.

Security operations consulting

5G security operations require more than just the latest equipment. You also need to understand how to integrate that equipment with the latest frameworks, methodologies and processes, and how to evolve your operations along with them. We help you transform your security operations with advanced orchestration, analytics and response, and by enabling a consolidated view of security threats and your security posture so you can respond faster and more effectively. No matter your Security Operations Center (SOC) model — virtual, multi-functional or dedicated to a command SOC — we work with your environment and organizational structure.

Security operations consulting
We work with you to define the KPIs that will support your business targets and advise on the security measures you need to operate 5G securely and efficiently.

Security use case automation consulting
We deliver 4G and 5G security expertise to define new use cases to help you reduce time to detection, time to response and time to recovery via automation and playbooks.

Benefits

- Detect, respond to and recover from security breaches faster.
- Operate your 5G networks and services securely and efficiently.
- Comply with security and privacy regulations more effectively with less effort.
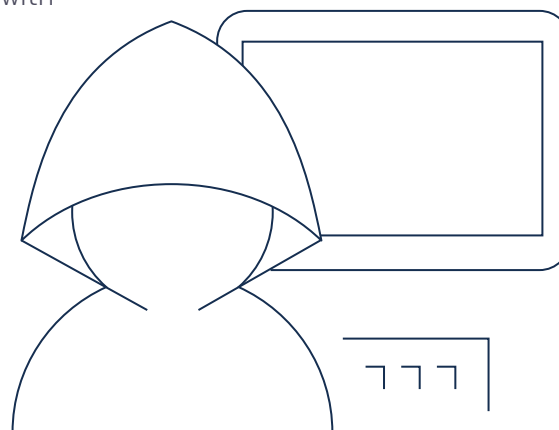
Balancing flexibility and complexity

Many CSPs are replacing traditional physical appliances like firewalls with virtual, software-based solutions. This delivers much greater flexibility but can exponentially increase complexity, as it may take hundreds of virtual firewalls to do the job of a single physical appliance. Our team can help you implement automated solutions to help you manage those virtual components and keep your systems safe and secure.

Your partner in comprehensive, future-ready security

With our proven network security expertise, we can help you transform your security operations and deliver real benefits:

Faster time to respond
With full visibility and improved workflows, incidents are detected, responded to and, if necessary, recovered from faster.

Scalable security
From pilot projects to full-scale deployments, get complete protection at every stage.

Reduced human error
With automated tools processing alerts and taking appropriate actions, you can minimize the risk of human error leading to a major incident.

Better compliance
A comprehensive, fully auditable, end-to-end security solution gives you confidence that you're compliant with global 5G and security standards.

Full-spectrum consulting services

Nokia is unique in the consulting services arena: we have worldwide software and network expertise, real-world experience in 5G, IoT and cloud solution deployment, and broad perspective on how CSPs are tackling the digital transformation challenge. With insights from our global customer engagements, we create and implement end-to-end transformation blueprints for the most complex, multi-vendor and future-facing environments.

Check out our full suite of Nokia Cloud and Network Services Advanced Consulting practices
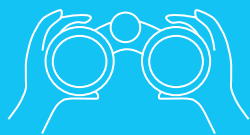
Business Consulting
Digitally transform your business with results you can measure.

Security Consulting
Tackle today's toughest network security challenges with confidence.

Technology Consulting
Get the best performance out of your existing and future technologies.

Data Science & Analytics Consulting
Turn data into insight and insight into strategy to grow your business the way you want.

Operations Consulting
Realign your processes for greater agility — and conquer operational complexity.

Target Operating Mode Consulting
Become a truly digital organization with as-a-service platforms, infrastructure and networks.

Want to know more?

Contact us to learn more or to start a Nokia Cloud and Network Services consulting engagement.

NOKIA

Nokia OYJ
Karakaari 7
02610 Espoo
Finland

Document code: CID207860 (January)

About Nokia

We create the technology to connect the world. Only Nokia offers a comprehensive portfolio of network equipment, software, services and licensing opportunities across the globe. With our commitment to innovation, driven by the award-winning Nokia Bell Labs, we are a leader in the development and deployment of 5G networks.

Our communications service provider customers support more than 6.4 billion subscriptions with our radio networks, and our enterprise customers have deployed over 1,300 industrial networks worldwide. Adhering to the highest ethical standards, we transform how people live, work and communicate. For our latest updates, please visit us online www.nokia.com and follow us on Twitter @nokia.