



Supercharged security

Powerful 5G security assurance
with Nokia NetGuard Cybersecurity Dome

NOKIA

With cyber attacks, every second counts — and has a cost

Security operations teams are under pressure to defend against cyber threats and contain the cost of breaches — protecting network environments that have never been more open or more challenging to secure.

Cloudification, multiplying application programming interfaces (APIs) and open 5G architectures are dramatically increasing the network attack surface, giving malicious actors more points of entry and more opportunities to break through. Communications service provider (CSP) security teams have to scramble to fend off attacks amid nonstop alerts and floods of log data that make it hard to tell real incidents from false alarms. All while the costs and consequences of breaches continue to climb.

To conquer the challenge and protect the network, CSP security operations teams need smart, fast tools to identify and respond to threats in real time — such as the automated, artificial intelligence (AI)-driven Nokia NetGuard Cybersecurity Dome.

The average cost of a full data breach is \$4.3 million — and climbing.

Ponemon Institute, report 2022



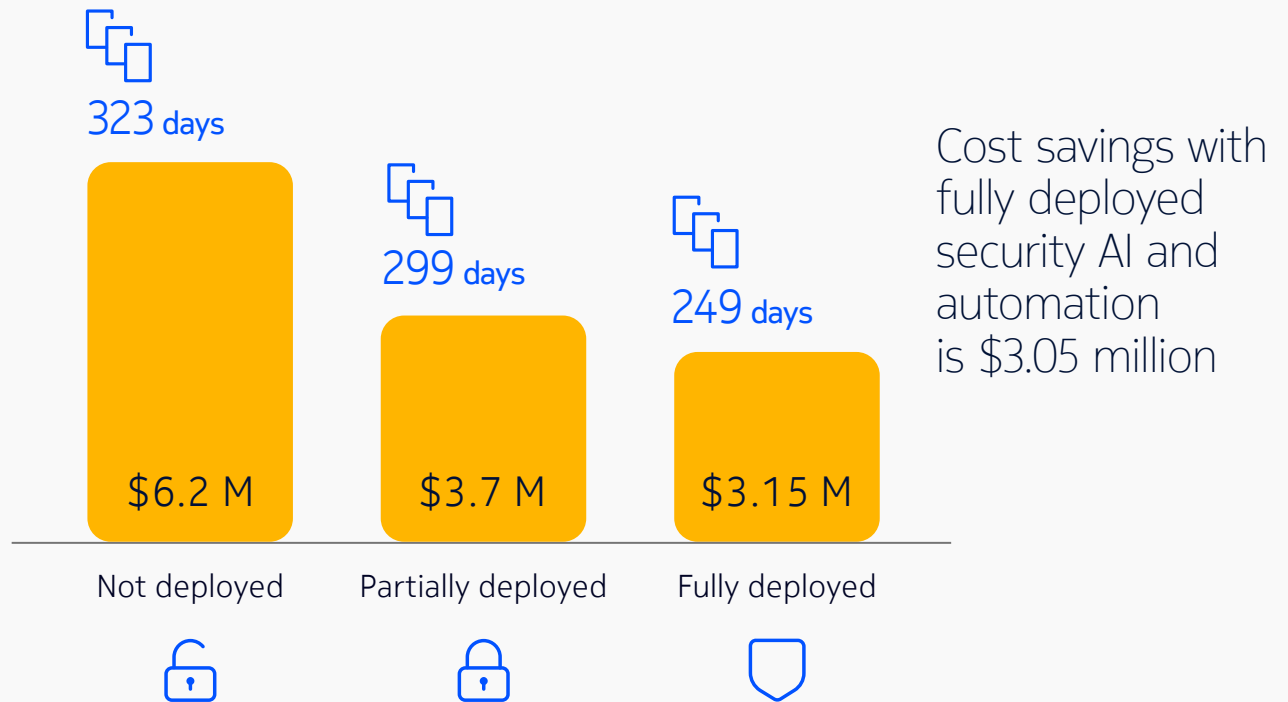
The longer a breach goes undetected, the higher the price tag

The sheer volume of network activity makes it challenging for CSP security teams to identify breaches when they occur. Every day that goes by with attacks undetected, more damage is done — at a higher cost to the organization.

In a network with no AI or automation to support security actions, a breach could take 323 days to resolve and cost a company nearly \$6.2 million. Partial deployment of AI and automation could drop the resolution time to 299 days — and the cost to \$3.7 million. And with full automation, resolution can be accelerated even further, to under 249 days and to \$3.15 million.

Nokia NetGuard Cybersecurity Dome enables these kinds of time gains and cost savings by combining extended detection and response (XDR), AI and machine learning. That enables robust, automated threat prediction, prevention and response across the entire network topology from the 5G core to the RAN to the transport network.

Figure 1. AI and automation bring down the cost of a breach



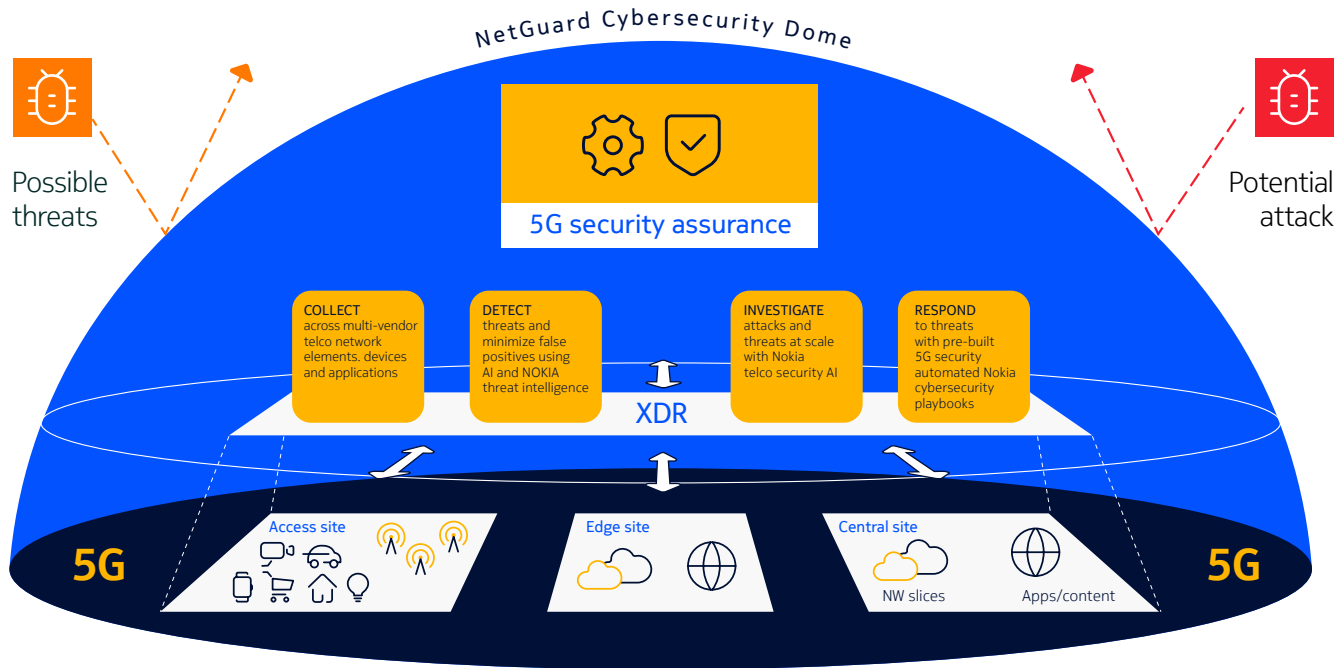
Source: Ponemon Institute Report 2022

Built for today's SecOps reality

Nokia NetGuard Cybersecurity Dome is offered as a security-as-a-service (SaaS) in a hybrid deployment model with a small on-premises component to keep critical data on site.

This solves specific security problems through a set of applications based on security use cases built by cross-functional 5G teams. Including input from Nokia Bell Labs to address a vast

array of 5G-specific security threats. Incident management functionality is provided by Microsoft Sentinel, a Security Information and Event Management (SIEM) application deployed through the Microsoft Azure public cloud.



The XDR advantage

- XDR is at the heart of Nokia NetGuard Cybersecurity Dome. It provides alert prioritization and classification capabilities, helping security teams dismiss false positives and target real attacks.
- Automatically classifying alerts by type and security, XDR removes the need to investigate every alert, letting security teams focus on stopping and addressing legitimate attacks. XDR also helps CSPs meet slice-specific service level agreements.

Learn more about the functionality of our new NetGuard Cybersecurity Dome solution and check out our demo.

Request 1-on-1 demo

Delivering advanced security assurance

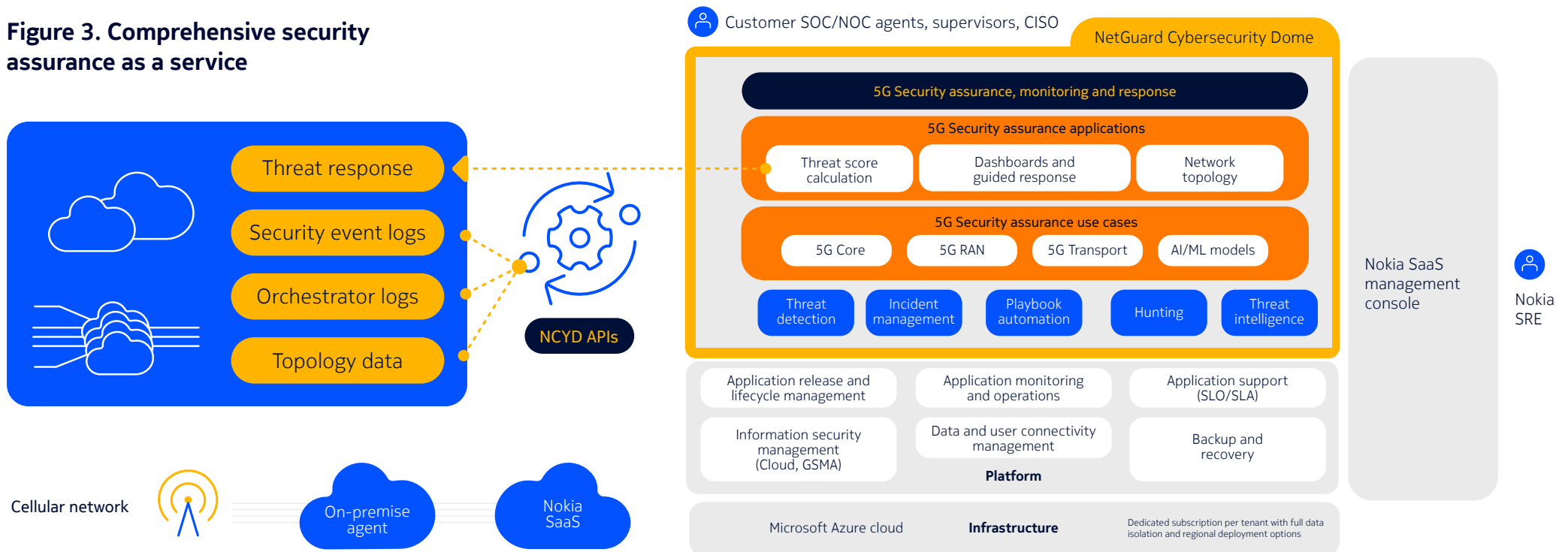
Nokia NetGuard Cybersecurity Dome provides the security assurance capabilities CSPs need to be confident in every element of the network so it can protect itself from attack no matter how the threat landscape evolves.

Multi-domain threat scoring performs calculations at the network element level to determine the likelihood of a security breach based on data from multiple intelligence sources while automated incident response allows security analysts to create cyber

playbooks that kick into action whenever predefined triggers are engaged, speeding up mean time to respond. Differentiated machine learning capabilities enable advanced, AI-driven long analytics to detect unusual patterns and predict attacks.

NetGuard Cybersecurity Dome (NCYD) also provides cross-layered detection and response for all endpoints through the network and the cloud — along with cross-layer data correlation that matches security events to intelligence-driven alerts.

Figure 3. Comprehensive security assurance as a service



Beneath the Dome: What sets Nokia NetGuard Cybersecurity Dome apart?

NetGuard Cybersecurity Dome offers powerful, innovative features and applications that stand out from other security-as-a-service solutions today:

Purpose-built security applications

Solve telco-specific problems related to 5G security, slicing, B2B services, emergency response and premium user security.

Pre-integration

Provide security throughout the 5G core, radio, transport and cloud (Kubernetes) with Nokia 5G core/zero trust systems and our DO Center Suite.

Application-specific visualization

Take advantage of 5G topology-based interactive visualizations, war room-style emergency response and subscriber-centric views by application.

SaaS and Hybrid deployment models

Seize the power of the public cloud while ensuring sensitive data is kept on-premises as needed.

Specialized 5G security knowledge

Nokia has infused Cybersecurity Dome with 5G use cases built on years of deep telco network expertise.

B2B revenue opportunities

5G slice-based security solutions can be resold to enterprise customers.

The leader in telco network security

Nokia's real-world knowledge of CSP operations and security requirements make NetGuard Cybersecurity Dome a powerful, practical solution for security assurance in the 5G world.

Its built-in AI learns about, adapts to and predicts new threats and attacks while category-specific dashboards give full visibility and situation awareness without the overwhelm of unfiltered data and unnecessary alerts. That's combined with threat intelligence that brings context and recognizes malware traffic on mobile and Internet of Things (IoT) devices.

Nokia NetGuard Cybersecurity Dome's automated workflow execution and orchestration execute processes that need to be done manually by security analysts today, helping address threats faster and reduce the impact and cost of attacks.

Visit our website or contact us today to learn more about Nokia Cybersecurity Dome.



Nokia OYJ
Karakaari 7
02610 Espoo
Finland

Tel. +358 (0) 10 44 88 000

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At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering the future where networks meet cloud to realize the full potential of digital in every industry.

Through networks that sense, think and act, we work with our customers and partners to create the digital services and applications of the future.

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