**SecurityGen**
Telecom Security. Transcending Generations.

# 5G
# SECURITY
# PROGRAM

The world is looking forward to the 5G age. A huge digital shift will shape our society, and MNOs are working hard to make it happen. They are building completely new infrastructure, rethinking traditional practices, and creating new business models to recoup all these expenses. New Service offerings will be a key ROI strategy for telcos. Market leadership will depend on delivering diverse and top-quality services in which security is a value-add.

5G networks will not exclusively serve cell phones like existing cellular networks do. They will be competing with, and even replacing, cabled Internet from existing ISPs, making possible critical applications such as telesurgery, self-driving cars, and private networks where security is an absolute must.

Both business objectives and increasing accountability make it clear: mobile service providers must build 5G infrastructure with security from the ground up. The 5G Security Program helps operators to reinforce their security strategy and build appropriate guidelines for maintaining reliability and resiliency on their 5G SA/NSA network and services.

# WHY ACT NOW?

## COMPETITION

Competition for subscribers and new business opportunities mean challenging not just other mobile service providers, but Internet service providers and banks. Make your security strategy a value-added asset.

## COMPLIANCE

Ever-increasing list of regulatory requirements from industry and governments. Violations can result in huge fines.

## CRITICALITY

Telecom infrastructure has always been critical. As 5G penetration expands to even more areas of life this importance will only increase.

## NEW AND HIDDEN THREATS

With 5G, "telecom" and "IT" infrastructure become one and the same. Traditional IP-based threats will combine with more traditional issues for telecom in the 5G context. Considering network silos and the sheer complexity of new configuration burdens, not to mention constant changes, vulnerabilities will inevitably appear.

## FRAUD AND CRIME

Hackers are getting better and more sophisticated every day. New techniques can evade most traditional security tools. MNOs must be prepared to take effective measures.

## AHEAD OF THE CURVE

Define your requirements for vendors and partners before taking solution delivery. Shape security to your infrastructure needs. Align new business processes with security requirements before doing a full-scale 5G rollout.

# WHAT DO YOU GET WITH OUR
## 5G SECURITY PROGRAM?

- Business impact evaluation of threats

- Clear, actionable recommendations for ongoing 5G security strategy based on our findings

- Guidance for immediate remediation of critical weaknesses and vulnerabilities
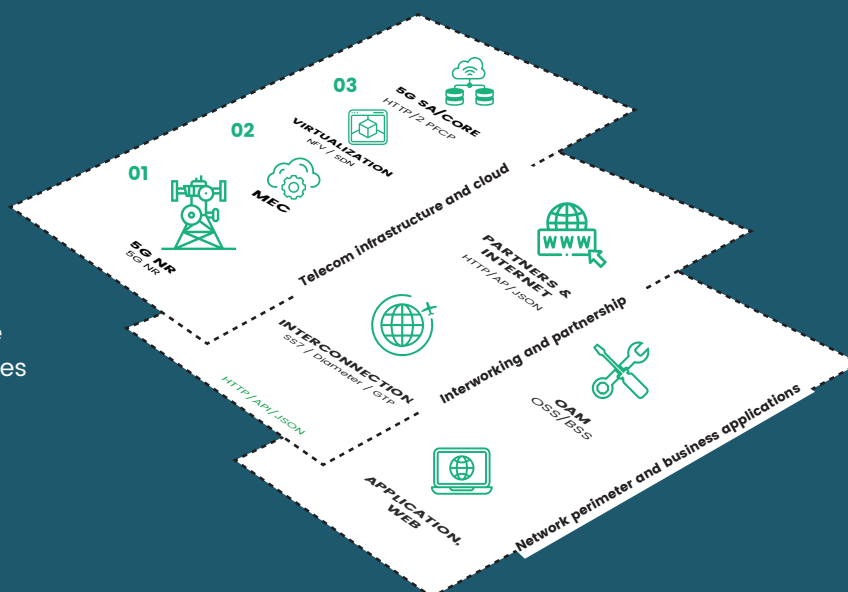
- Security assurance for your service offering

- Verification of compliance with industry recommendations where applicable

# END-TO-END SECURITY

By design, telecom networks have a large attack surface. End-to-end security will be crucial for MNOs as they face the challenges emerging in a multi-domain ecosystem such as 5G. As part of the 5G Security Program, we scan and test all telecom infrastructure domains.

03 5G SA/CORE — HTTP/2 PFCP
02 VIRTUALIZATION — NFV / SDN
01 MEC
5G NR — 5G NR

Telecom infrastructure and cloud

PARTNERS & INTERNET — HTTP/ API / JSON

INTERCONNECTION — SS7 / Diameter / GTP

Interworking and partnership

HTTP / API / JSON

OAM — OSS/BSS

APPLICATION, WEB

Network perimeter and business applications

# WHAT IS INCLUDED?

### 5G SA/NSA Core Security Assessment

In-depth audit against SS7, Diameter, GTP, HTTP/2 and PFCP threats: roaming and inbound traffic analysis

### 5G Telco Cloud Assessment

Deep assessment of cloud applications and technologies used (virtualization, containers, MEC, SDN, NFV, MANO)

### Integrations Security Health Check

Deep screening of telecom interconnections and partnership APIs

### Fraud Risk Assessment

Extensive checks of how resilient your network is against various fraud scenarios

### Compliance check

Check of compliance with GSMA guidelines

### Operations Resilience Check

OSS/BSS and in-house business application assessment

### Application Security Assessment

Network perimeter audit and security analysis against HTTP, API, and JSON breaches in web applications, including black/gray/white box scanning

### 5G New Radio Security Assessment

RAN security assessment

## HOW DOES IT WORK?

**1**

**Interview**

Every network configuration and architecture is unique. During the kick-off interview, we'll hone in on what matters for your business.

**2**

**Scope and timeline**

We work with you to establish the project scope, timeline, and details.

**3**

**Active phase**

Things get active as we conduct in-depth analysis of your infrastructure and provide consultations with our security experts. Can be performed remotely if desired (VPN connection to the internal network is required for testing).

**4**

**Reporting and action plan**

You get clear guidelines for building a 5G security strategy based on findings and our advice. Wrap-up and consulting on remaining questions.

## About SecurityGen

SecurityGen is a global company focused on telecom security. We deliver a solid security foundation to drive secure telecom digital transformations and ensure safe and robust network operations. Our extensive product and service portfolio provides complete protection against existing and advanced telecom security threats.

## Connect With Us

✉ Email: **contact@secgen.com**

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India | South Korea | Japan | Malaysia | UAE