SecurityGen
Telecom Security. Transcending Generations.

LG U+

Case Study

# SecurityGen ACE helps LG U+ address 5G security challenges and build a robust protection strategy

## The Customer: LG U+

**LG U+** is the third-largest wireless carrier in South Korea, with over 16.6 million subscribers. With the objective of making the customers' lives more convenient and their time more valuable, **LG U+** focuses on bringing unique experiences and impressions to customers' daily lives.

As a leader in the telecommunication market, **LG U+** is leading communication services across the 5G and IoT era, commercializing 5G for the first time in the world and exporting 5G content represented by AR/VR. In addition, it is developing and providing intelligent solutions optimized for the rapidly changing business environment by utilizing 5G, industrial IoT, and AI technologies.

## Business Background

Mobile network operator **LG Uplus (LG U+)** moved quickly to become an early 5G adopter. Since 5G is becoming the backbone for critical applications, **LG U+** wanted to build a solid foundation for security in the 5G era for ensuring business continuity and technological leadership in the competitive South Korean telecom market.

**LG U+** sought to enable robust, all-encompassing security across its service lineup. This was aligned to the company's strategic goal of building a differentiated, flexible, and secure 5G service environment for B2B and B2C customers.

## The Business Challenge

In practice, this meant that **LG U+** continually searches and eliminates hidden and emerging attack surfaces. These steps strengthen the network while supporting reliability and resiliency on the company's 5G journey.

### 5G technology brings several new challenges:

- 5G is disruptive. Infrastructure is being completely reshaped. Converging IT with telco will inevitably bring misconfigurations and hidden threats.
- Architectural vulnerabilities of legacy networks (2G, 3G, and 4G) continue to affect the security of 5G Non-Standalone (5G NSA).
- New use cases and critical applications are eagerly awaited by society while potentially offering a gold mine for hackers.
- The shortage of cybersecurity skills creates a challenge for companies. Telecom systems are growing in number and complexity, but skilled security pros with expertise in both IT and telecom are tough to find.
- Regulatory scrutiny is increasing as telecom companies grow in importance.

# The Solution

To address the 5G related challenges and build a robust protection strategy, **LG U⁺** believed that a systematic approach with continuous monitoring and validation of the security systems was essential. That's why **LG U⁺** added automated security health checks to its signalling network with **SecurityGen ACE (Artificial Cybersecurity Expert).**

**ACE, SecurityGen's Breach and Attack Simulation platform for telecoms is designed on a proactive security model and helps strengthen the security posture by constantly monitoring and preventing security breaches.**

Mobile operators gain a number of capabilities from automated AI-powered security assessment and compliance. With SecurityGen ACE, they can do more than ever.

# The Business Benefits

**LG U⁺** could strengthen its security posture and subscriber appeal with B2B and B2C offerings. With awareness of all threat vectors, **LG U⁺** can ensure full network visibility for ongoing protection. With a comprehensive security strategy that incorporates **SecurityGen ACE,** LG U⁺ meets key business challenges.

- Establishing itself as a leader in secure 5G services.
- Unlocking long-term market growth with a security-first approach.
- Resolving security constraints without waiting for in-the-wild attacks to strike.
- Automating security management to handle the increased complexity of 5G.

# Key Metrics

Within a short span of deployment, LG U⁺ could register positive results.

- **Better visibility** and control over security systems
- **50% reduction** in assessment service costs
- **Automated approach** enabled express assessment and compliance tests
- **Significant reduction up to 60%** in time required for security testing process

Legacy network vulnerabilities will continue to affect 5G networks for several decades ahead. Therefore, I think that management of the known vulnerabilities for legacy networks is as important as security for 5G. In order to effectively respond tocyber-attacks, activities to identify, respond to, and repair vulnerabilities must be continuously carried out.

We think SecurityGen ACE is a necessary solution for continuous security activities. SecurityGen ACE helps to increase the security of the legacy network, and we think it is effective in increasing the security level.

**Mr. ShinYoung Oh,**

Manager / Information Security Analysis Team LGU+

## About SecurityGen

Founded in 2022, 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

Website: https://www.secgen.com

UK | Italy | Czech Republic | Brazil | Egypt
India | South Korea | Japan | Malaysia | UAE