Gilat

Case Study: Consumer Broadband Across Europe

High Performance at Competitive Prices

Executive Summary

The Challenge
Offer satellite-based broadband at terrestrial speeds — with competitive pricing

The Solution
- High-performance SkyEdge II-c chassis
- Streamlined system installation and activation to reduce customer premises equipment (CPE) cost
- TotalNMS network management system

Benefits of Gilat
- High-speed consumer broadband
- Optimized for Ka-band beam systems
- Low-cost CPE

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Gilat delivers a high-performance broadband network for large-scale consumer use, applicable for Ka-band beam satellite systems, using affordable end-user equipment.

"
Gilat's advanced SkyEdge II-c technology, featuring high data rates and cost-effective terminal technology, allows us to further optimize our service proposition... and to increase the competitive advantage of our satellite-based Internet service.
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Patrick Biewer,
Managing Director, SES Techcom Services

The Challenge: Speedy, Affordable Internet

SES Techcom Services, a fully owned SES affiliate, provides its Astra Connect satellite Internet services to underserved areas of Europe at speeds comparable to terrestrial networks – and at competitive prices.

SES Techcom Services chose Gilat Satellite Networks to develop and provide a cost-effective system that could operate large-scale, high-performance networks. In addition, the solution would need to support a variety of service plans and allow for self-installation.

The Solution: High-performance, Compact CPE

Meeting the challenge of delivering the necessary performance at the desired price, Gilat successfully implemented its Sky Edge II-c chassis, a specially designed satellite terminal and an easy-to-install antenna unit. Recently, the Astra Connect network was extended by adding Gilat's ground segment platform, powered by X-Architecture. This addition will allow SES Techcom Services to scale and potentially expand to additional markets such as enterprise, cellular and mobility.

To reduce end users' equipment expense, Gilat designed a low-cost SkyEdge solution with simplified system installation and activation. The customer premises equipment (CPE) kit includes the full antenna assembly, modem, transceiver, RF cables and instruction manual. This self-install option has been chosen by many end users.

SkyEdge II-c unit

SES Techcom Services chose the SkyEdge II-c high-performance, compact chassis with X-Architecture because it was designed to operate large networks and is optimized for Ka-band. It provides flexibility for consumer networks, enabling triple-play services: high-speed Internet, VoIP and IPTV. This chassis is ideal for Astra Connect service because it allows the ISPs to have full control over their service parameters, such as terminal speeds, usage quotas, oversubscription and QoS profiles. Gilat's high speed modem today reaches speeds of up to 40Mbps, leading in broadband performance to the home over satellite.

The CPE enables reliable antenna self-installation with simple audio feedback, helping the end-user point the antenna at the correct satellite and fine-tune the reception without any additional equipment or professional installation. Gilat also designed a combined transceiver and low noise block to reduce the complexity of setting up the system. Once the outdoor equipment is in place, a web-based interface walks the user through the final setup, activation and authentication process.

The process is automated for the ISP through Gilat's network management system, TotalNMS. It provides service-oriented network management for the entire SkyEdge II-c network, which can support large-scale deployments greater than one million subscribers. This solution suited SES Techcom Services perfectly, because it allows the ISP to manage network services directly and independently. SES Techcom Services also uses TotalNMS to configure, control, and monitor the gateways and chassis. Through a single interface point, TotalNMS also allows:

· Profile-based CPE configuration for fast service introduction and modification

· Detailed reporting on network performance and usage per CPE

· Enhanced troubleshooting and diagnostics tools

· Fast and reliable resource allocation

· Detailed reporting on network performance and usage per ISP

The high performance broadband network for consumer use began shortly after the first commercial Ka-band satellite, Astra 2F, was launched, utilizing spot beams to cover areas throughout Europe. Since the start of the service, Gilat has shipped around 40,000 VSATs to more than 18 ISPs throughout Europe.

The Gilat Advantage

Deploying Gilat's SkyEdge solutions offer SES Techcom Services the following benefits:

· Low cost CPE: Gilat designed a low-cost solution with simplified system installation and activation

· High performance: Faster Internet browsing is made possible by embedded TCP and HTTP acceleration

· Support large scale deployments: Gilat's TotalNMS and SkyEdge II-c equipment makes it easier to manage more than one million sites on multiple network segments·