



Gilat Satellite Networks facilitate Tricolor TV broadband service

Tricolor TV's game-changing 'Satellite Internet' service allows previously unconnected Russian consumers to access the Internet at an affordable price. This forward-looking satellite TV provider is using Gilat's Broadband Access solution and Eutelsat's high throughput satellite (HTS) network to deliver broadband access to homes and businesses in Western Russia's isolated regions. Doreet Oren, Director of Product Marketing at Gilat Satellite Networks, outlines the development of the 'Satellite Internet' project, and how it has changed the lives of many.

About half of the world's population still isn't connected to the Internet, and most of those 3.5 billion people live in remote areas in both developed and developing countries. Bringing Internet access to these unconnected communities is vital for the economic development, education and physical health of their residents. However, to make this vision a reality, service providers must overcome a number of serious obstacles inherent to remote areas, such as lack of infrastructure, topological barriers and exorbitant deployment costs.

Two years ago, this would have been a very accurate description of the consumer broadband market in Western Russia's remote towns and villages. Simple tasks that most of us take for granted, such as surfing the Internet or sending an email, was a dream for the residents of these unconnected markets. Terrestrial infrastructure did not support high-speed broadband services, and satellite-based services were



Russia Coverage of Eutelsat 36c HTS Satellite



Gilat consumer broadband installation

prohibitively expensive due to the high cost of Ku-band satellite capacity.

Tricolor TV rises to the challenge

Tricolor TV, Russia's largest direct to home (DTH) satellite TV provider, decided it was time to challenge this status quo.

Tricolor TV recognized the business potential of bringing Internet access to unconnected remote markets lacking sufficiently developed terrestrial network infrastructure. But it also knew that for its two-way 'Satellite Internet' service to succeed where others had failed, it had to reduce the end user price without compromising service quality.

To execute this strategy, Tricolor TV needed to find innovative technology partners that would allow it to effectively leverage less expensive, high throughput Ka-band satellites. The savings in OPEX could then be passed on to its Satellite Internet subscribers.

On the consumer end, Tricolor TV sought an easy-toinstall VSAT device that could support broadband Internet services over Ka-band with performance equal to that of a terrestrial solution. To offer an attractively priced consumer service, back-end support for flexible, usage-based tariff plans was another important business requirement.

The project: Deployment of Gilat's SkyEdge II-c VSAT for consumer broadband

To meet these challenging requirements, Tricolor TV chose Gilat's consumer broadband VSAT solution, comprising a multi-service hub platform and high-performance VSAT terminals

Subscribers connect to Tricolor TV's broadband service using Gilat's easy-to-install Gemini VSAT terminal. Designed to enhance the user experience, the Gemini VSAT enables fast web browsing, video streaming, IPTV, VoIP, and other broadband services. The VSAT contains a full set of protocol optimization and application acceleration features, including TCP and HTTP protocol acceleration and payload compression. Gemini's advanced adaptive transmission technologies maximize performance and improve service availability for HTS and wide-beam satellites.

Satellite capacity is provided by Eutelsat's Express AMU1/ EUTELSAT 36C HTS, whose pavload comprises 18 Ka-band beams delivering continuous coverage of Western Russia from the Arctic coastline to the Caspian Sea. The Eutelsat network is managed by Gilat's SkyEdge II-c hub platform at the Dubna satellite center. Thanks to Gilat's multi-VNO model. which allows Eutelsat to use the same hardware platform for multiple service providers, Tricolor TV was able to launch its 'Satellite Internet' service with minimal infrastructure investment.

"In working with Gilat, we are putting in place a key component of a high-performance broadband infrastructure that will deliver high-quality connectivity," said Kirill Yanchenko, General Director of the Eutelsat Networks company that markets satellite services in Russia.

Comprehensive management capabilities are provided through Gilat's scalable and distributed SkyEdge II-c hub platform, which is optimized for high throughput satellites. The centralized global management system provides advanced and flexible ISP management capabilities including usage-based service plans, data quota management, automatic service activation, provisioning and integration with existing billing systems.

Bottom line: Affordable, easy-to-deploy Internet access for consumers

Now fully operational, Tricolor TV's 'Satellite Internet' service offers consumer and professional subscribers high-speed data, voice and Internet access with speeds of up to 40Mbps downstream and 12Mbps upstream. This attractively-priced service is ideal for mass consumption, starting at a minimum of 275 rubles (~\$1.25)/month for up to 1GB of traffic and increasing incrementally based on the level of usage.

To meet the needs of non-technical consumers and to reduce equipment costs, Gilat's Gemini VSAT is designed for simple setup and installation. The VSAT can be selfinstalled and set up in less than 90 minutes with automatic service activation. Tricolor TV is also planning to offer Gilat's Scorpio VSAT, an innovative all-outdoor VSAT-in-a-Box, which further simplifies the installation process and allows for easy maintenance and roof mounting.

"Satellite Internet' is a modern, technological product that provides subscribers with access to high speed Internet even in regions where the use of alternative access methods to the network is difficult," said Alexey Karpov, Director of Sales and Subscriber Service at Tricolor TV. "By working together with Eutelsat Networks, and with Gilat's broadband consumer VSATs, we can offer consumers high-quality and affordable broadband access to the Internet." 200

