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Companies review their successes, technologies and products for 2022 as well as some interesting thoughts regarding the industry.



An Expansion of Communication + Connectivity

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Gilat Satellite Networks is a leading global provider of satellite-based broadband communications and believes in the right of all people to be connected – the company provides broadband connectivity to millions of users in all parts of the world, on the land, in the air and at sea

The satellite industry is undergoing tremendous innovation and change. **The launch of Non- GEO Stationary (NGSO)** constellations and highly configurable software defined satellites are offering the industry unprecedented increases in bandwidth and flexibility. However, while these new satellites and digital payloads offer a profound step up in capability, they are also introducing far more complexity, and growing the need for ground-breaking deep technology and tight integration between ground and space.

This next generation of satellite communication, including multi-orbit constellations and **very high throughput satellites (VHTS)**, was named the **Elastix Era** by Gilat. The advancements enable ubiquitous connectivity for fixed and mobility sites anywhere on land, sea and air, and answer the promise of the cloud, 5G, and IoT while enabling superior service for mobility, defense, cellular backhaul and the enterprise markets.

This was the driving force in the development of **SkyEdge IV**, Gilat's latest ground segment technology. SkyEdge IV is a highly elastic platform that enables the creation of programmable **Software-Defined Networks (SDN)** that support on-the-fly changes to optimally address dynamic network changes. SkyEdge IV has already secured millions of dollars' worth of contract awards. This multi-orbit, multi-service platform includes **Aquarius**, a family of ultra-high processing capacity VSATs, achieving above 2Gbps aggregated throughput and high packets-per-second processing. The platform is further equipped with **Elastix-TotalNMS** to orchestrate network management for a unified network.

SkyEdge IV also increases operational efficiencies due to scalable software centricity and provides VSAT backward compatibility to preserve SkyEdge II-c customer investment.



Gilat offers numerous IFC solutions.

The SkyEdge IV announcement was followed by news that Gilat expanded its strategic partnership with **SES** who selected Gilat's SkyEdge IV platform to operate with their SES-17 satellite, a GEO VHTS designed for high-speed connectivity and flexibility for end-users in the Americas, the Caribbean, and the Atlantic Ocean. SkyEdge IV will deliver cellular-backhaul and enterprise services, in addition to maritime services. SES will be using SkyEdge IV simultaneously for the **SES-17** satellite and the company's **O3b mPOWER** constellation. SkyEdge IV ensures unified operation with seamless switchover between GEO satellites and NGSO constellations.

Intelsat completed a strategic selection process and placed a significant, initial order for Gilat's SkyEdge IV platform for use in that company's latest HTS, **Intelsat IS-40e**, designed to augment inflight connectivity and mobile backhaul services over North America. Gilat's standards-based interfaces enable seamless integration with Intelsat's unified space and ground network, thereby elevating the service levels for thousands of aircraft and leading mobile network operators. Gilat also enjoyed major achievements supporting **Low Earth Orbit (LEO)** constellation gateways. Gilat's subsidiary, **Wavestream** was selected as the provider of **Gateway Solid State Power Amplifiers (SSPAs)** in projects potentially worth hundreds of millions of dollars.



According to the latest report by industry analyst **NSR**, Gilat is the number one vendor in modem shipments, with a market share of approximately 40%. Gilat also continues to lead the 4G/LTE market with a 75% market share. In Japan, Gilat is the dominant player serving Tier-1 MNOs and continues to provide cellular network expansions into rural zones that are lacking fiber access as well as solutions for emergency response. In Latin America, Tier-1 **MNO TIM Brazil**

reached a milestone of more than 1,000 sites, leveraging Gilat's SkyEdge II-c platform to build the largest 4G satellite cellular backhaul network in Latin America. One of the world's largest Mobile Network Operators (MNOs), serving hundreds of millions of subscribers in Asia, is deploying [Gilat's SkyEdge II-c system](#) and [Capricorn Outdoor VSATs](#) to enable improved Voice and Data over LTE services for their mobile subscribers. Gilat was also selected by Intelsat to provide the satellite cellular backhaul solution for a leading mobile telecommunication company in the Democratic Republic of the Congo (DRC).

Mobility continues to be a major focus area for Gilat that has received numerous contract awards from Intelsat. To enable the expansion of commercial and business aviation services in Asia, Intelsat will be using Gilat's SkyEdge II-c and SkyEdge IV platforms to allow aviation service providers, such as Intelsat, to streamline service fulfillment and provide a superior user experience to airline passengers.

Intelsat made a strategic decision to expand its **in-flight connectivity (IFC)** capabilities with a multimillion-dollar order for Gilat's Taurus modems, an ultra-high-performance modem for IFC designed to provide Wi-Fi internet and IPTV for passengers on commercial airlines, regional aircraft and business jets. [Taurus](#) runs on SkyEdge II-c and SkyEdge IV platforms.

Gilat has also received an order of more than \$10 million dollars from a large, global, aerospace system integrator who for years has continued to rely on Wavestream's Ka-band [AeroStream™](#) family of transceiver products to enable in-flight connectivity. With these new orders, Gilat's subsidiary Wavestream is growing its lead in the IFC marketplace, now with more than 3,000 units successfully operating on commercial and business aviation aircraft worldwide.

At sea, Gilat announced a new deal with a Eurasian satellite service provider to enable expanded maritime connectivity in the region. Gilat's SkyEdge II-c system, equipped with [Gemini](#) and [Capricorn](#) VSATs, will be used to deliver connectivity for vessels at sea, primarily providing broadband communication for commercial fishing and maritime transport market segments.

A technical breakthrough was achieved for Gilat's **electronically steerable antenna (ESA)** technology for IFC. The achievement was reached at the conclusion of flight tests conducted by [Airbus Defense and Space](#), marking the successful completion of the final phase of the five-year [Clean Sky 2 IFC ESA](#) project. In the Enterprise segment, Gilat received awards across several different verticals as well as geographic

regions. The company signed an agreement to provide SkyEdge II-c to a government in Central Asia where the technology will be used to connect rural villages to the government network as well as serve as a backup communication channel for disaster preparedness and provide remote services to citizens.

In South America, Gilat was selected by [Sencinet](#), a large service provider in Brazil, to provide satellite connectivity via SkyEdge II-c for [Petrobras](#), Brazil's largest oil and gas company, as well as to a leading financial services company headquartered in Brazil. In addition, Gilat signed a multimillion-dollar deal to support business continuity for a large U.S. retail network. SkyEdge II-c is now supporting thousands of storefronts throughout the United States, with the required gateway backup to guarantee that each of the stores has the assurance of always being connected.

Gilat is continuing to increase its focus in the Defense market and is seeing success with the **Unmanned Aerial Vehicles (UAV)** product line. A world-leading UAV manufacturer has placed an order for satellite terminals as the satellite antenna solution for its tactical UAVs. Gilat was also awarded follow-on orders for the expansion of a defense force military satellite communication network in an Asian nation. Gilat's SkyEdge II-c hubs and Capricorn VSATs will be used to expand tactical MILSATCOM solutions for mobile platforms, will increase the availability of communication channels for emergency and disaster response, as well as address mission-critical C4I needs.

Gilat is exceptionally proud to lead the industry in delivering broadband connectivity over satellite in the Elastix Era, to ensure that critical communication is available to all. With the launch of SkyEdge IV, Gilat is further demonstrating its dedication to technical innovation, outstanding support and superior delivery capabilities that enabled Gilat to drive the market for more than 30 years.

During 2023, Gilat plans to expand its leadership position as the market continues to transition to multi-orbit constellations and **very high throughput satellites (V-HTS)**, with a focus on supporting the CBH, Mobility, Enterprise and Defense market segments.

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