Growth pathways in the future of SatCom connectivity

Why the next five years will decide who captures the next wave of value in space connectivity

May 2026

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Satellite communications are in the middle of a structural change that is rewriting the economics, the geopolitics and the customer experience of staying connected from space. LEO constellations now carry the bulk of global capacity at latencies and prices comparable to terrestrial broadband, while GEO operators are showing limited growth and TSR over the last five years. At the same time, sovereignty has moved to the centre of national space policy, with Europe's €11 billion IRIS² programme, Telesat Lightspeed in Canada, and SatcomBW Stage 4 in Germany.

Three pathways will concentrate the next wave of value: in-flight connectivity, where global penetration could exceed 50 percent within a decade; direct-to-device services, addressing areas without terrestrial coverage; and sovereign constellations, increasingly designed for dual-use from day one. Starlink's lead in mass-market segments is large and probably durable, but the market is not winner-take-all: Amazon Leo, Telesat Lightspeed, Eutelsat-OneWeb and IRIS² are positioning around the segments where vertical integration is a feature for some customers and a problem for others. The implication for operators, industrial users, governments and investors is the same. Decisions taken in the next two to three years will set the competitive map for ten. The window is open, and narrowing.

A rapidly evolving SatCom world

For most of its history, satellite communications was a quiet, capital-intensive business. Geostationary operators leased capacity to broadcasters, governments and enterprise customers; revenues compounded predictably; new constellations took a decade to design, build and earn back. The investor pitch was infrastructure, not technology.

That world has unravelled in roughly five years.

The change has three sources. The first is technology. Low Earth Orbit constellations now account for well over 95 percent of operational satellites in service. Reusable launch, mass-produced spacecraft and inter-satellite links have driven both unit costs and end-user latency down to levels that let satellite broadband compete directly with terrestrial alternatives. A geostationary link adds roughly half a second of round-trip delay; a modern LEO connection operates in the tens of milliseconds. For most consumer use cases (browsing, voice, video, interactive applications), the difference from a fibre or 5G connection is invisible.

The second is geopolitics. The war in Ukraine, the resulting weaponisation of commercial space services, and a wider rebalancing of security alliances have moved sovereignty from the periphery to the centre of national space policy. Europe's €11 billion IRIS² programme, Canada's backing of Telesat Lightspeed, and active national initiatives in Italy and Germany SatcomBW Stage 4 all reflect a shared judgement: critical communications cannot rest indefinitely on infrastructure controlled by a single private operator in another jurisdiction. Demand for assured access, prioritised traffic and accreditation is now built into procurement specifications rather than added at the end.

The third is competitive intensity. A new generation of vertically integrated LEO operators is reshaping both the cost base and the customer offer. Most listed GEO operators now sit below 20 percent operating margin, with selling, general and administrative costs and depreciation running ahead of revenue. Five-year total shareholder return for GEO-centric players fell by roughly 20 percent between 2019 and 2024, while forward EV/EBITDA multiples held broadly flat. The market expects the squeeze to continue.

The combined effect is that satellite communications has stopped being a niche service sold to specialist customers. It is becoming part of the connectivity stack that consumers, enterprises and governments rely on every day. That shift creates the opportunity, and it creates the urgency. Decisions taken in the next two to three years (which constellation to back, which partnership to sign, which sovereign asset to fund) will set the competitive map for a decade.

Where the growth is coming from

Demand is broadening on three fronts at once.

Consumer access is moving from a small, underserved corner of the market to mass-market broadband. Households and small businesses in geographies with weak terrestrial coverage are the first wave; in mature markets, LEO household adoption is on a path to between 8 and 12 percent at maturity, supported by hardware iteration and pricing experiments. Monthly retail prices range from roughly 120 dollars in the United States to 40 to 50 dollars in many international markets. The pricing trend is downwards.

Enterprise data and backhaul is becoming a structural part of distributed IT and telecommunications architectures rather than a fallback option. Operators use satellite to connect remote cell towers, stitch supply chains together, and provide deterministic backup to cloud and private 5G. Treated as a second path rather than a last resort, satellite changes how enterprise networks are designed: redundancy is built in from the outset, and field operations gain a level of resilience that was uneconomic to engineer five years ago.

Mobility and government is the third growth pillar. Aviation, maritime and land-mobility corridors increasingly demand consistent multi-hundred-Mbps service with predictable service-level commitments.

Defence and intelligence customers are layering satellite as a secure, resilient backbone with the ability to surge capacity under stress. These are the segments where, even today, customers are willing to pay a premium for performance and assurance.

The growth is durable because it is multi-use and multi-orbit. LEO sets the experiential pace; geostationary and medium-Earth-orbit assets remain critical for coverage, broadcasting and peak-period capacity. Together they unlock applications (autonomous shipping, in-flight live video, real-time defence collaboration) that would have been operationally fragile or commercially unviable a few years ago.

What is changing fastest is the perception of satellite among customers who never considered it before. A regional airline now expects to specify connectivity as part of the passenger experience, not as an optional add-on. A logistics operator now treats LEO as part of its network design, not as an emergency contingency. A government CIO writes assurance and sovereignty requirements directly into telecommunications procurement. Each of these shifts brings new revenue into the segment, and reshapes the criteria on which operators will be selected.

Incumbents under pressure

The legacy of decades of GEO investment is still the single largest set of assets in the industry. It is also the part of the industry under the most strain.

Three things are squeezing incumbents at once.

The first is revenue. Across the past decade, most legacy operators have shown limited organic growth; several have been flat or in decline outside of M&A effects. The video segment, historically the workhorse of GEO economics, is in steady structural decline as broadcasting moves to fibre and streaming. Fixed enterprise data is softening as competitive intensity bites. Mobility and government are the bright spots, but not yet at the scale required to offset the rest of the portfolio.

The second is profitability. Industry benchmarking shows the majority of GEO operators below 20 percent operating margin. Selling, general and administrative costs have expanded faster than top line, and depreciation has risen sharply as next-generation fleets enter service. Where operators have added LEO or MEO capabilities through acquisitions, the strategic logic is sound, but capital intensity has risen and integration is taking longer than promised.

The third is execution risk. The past two years have produced a series of high-profile setbacks: a satellite impairment that wiped meaningful equity value at a major operator, revenue under-delivery from recently completed multi-orbit transactions, and continued weakness in media-heavy portfolios. None is fatal in isolation; in combination they have made investors cautious about pricing in execution upside before it materialises.

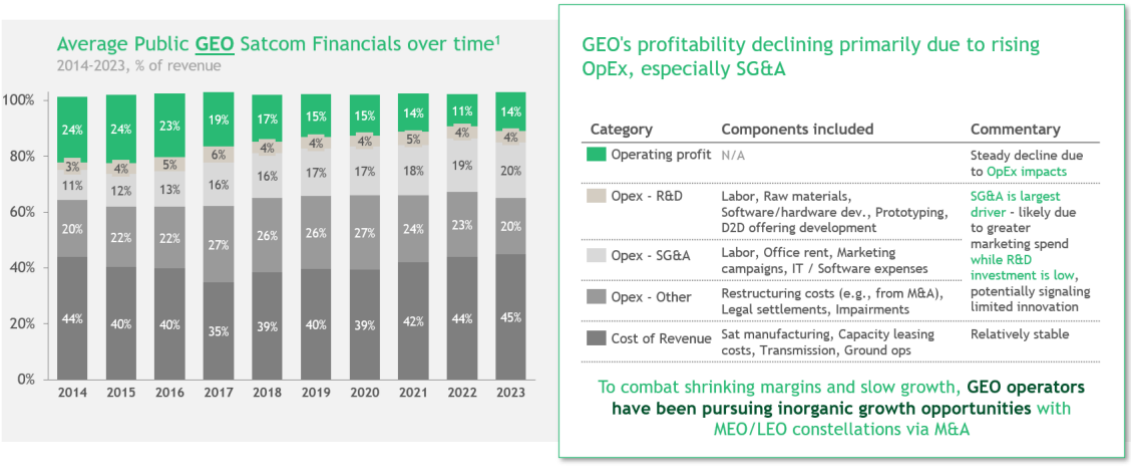


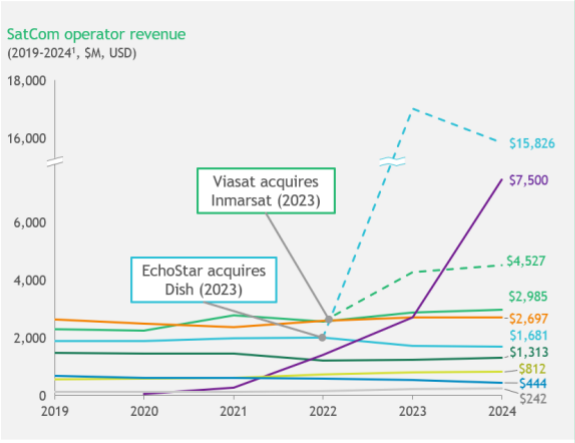
Exhibit 1: public GEO Satcom financials (2014-2023)

Incumbents are responding on three fronts. Multi-orbit consolidation is closing capability gaps: Viasat-Inmarsat, Eutelsat-OneWeb and the SES-Intelsat tie-up are reshaping portfolios around hybrid offers. The operating model is shifting from selling transponder capacity to selling outcomes, with software-defined networking, SLA-backed products, and terminal economics that match LEO's consumer-electronics cadence. Ecosystem partnerships with mobile network operators and device platforms are extending reach, eliminating dead zones and seeding direct-to-device features as a native extension of terrestrial networks.

These moves are necessary, and probably not sufficient on their own. The economics of LEO at scale are difficult to match through partnership and integration alone. The incumbents that succeed will be those that combine multi-orbit assets with credible service-layer differentiation, where the customer buys an outcome (a guaranteed level of connectivity for a fleet, a secure channel for a government department, a managed solution for an enterprise) rather than a capacity slot on a particular satellite.

Starlink and the challengers

The single biggest reason the industry has changed is the existence of one vertically integrated LEO platform. SpaceX's Starlink now carries most of the world's SatCom capacity. Latency has dropped to tens of milliseconds while end-user pricing remains broadly comparable to legacy GEO consumer plans. Margins have risen even as scale has grown, because the same actor designs and builds the satellites, launches them, controls the gateways and the network software, manufactures the user terminals, and sells the service. Vertical integration compresses cost-to-serve and shortens iteration cycles.



	Constellation	CAGR 2019-2024[1]	Commentary
GEO	Viasat[3]	5%	Growth driven by expanded IFC business and govt. contracts
	SES	0.4%	Declining video solutions business offset by O3b network BU
	Eutelsat	(2%)	Declining GEO video business (sig. portion of revenue); OneWeb integration is bet on hybrid strat.
	Echostar[3]	(2%)	Decline from legacy broadband losing share; Dish acquisition to diversify revenue streams
	Telesat	(8%)	Declining direct-to-home business in GEO; Slow transition to LEO
LEO	Starlink (est.) 2021-2024	>200%	Explosive growth from vertically-integrated broadband expansion
	Globalstar	13%	Stronger growth, driven by Apple partnership and IoT connectivity
	Iridium	7%	Consistent growth from diversified services (e.g., govt., maritime)

1. 2024 values are based on LTM as of 9/30/2024 2. Estimated Starlink CAGR from 2021-2024 3. Figures reflect Viasat and Echostar CAGR without influence of acquisition target company financials (i.e., Inmarsat and Dish)

Exhibit 2: revenue per SatCom operator (2019-2024)

Aviation is the cleanest illustration of how quickly customer expectations can reset. Within five years of market entry, Starlink has gone from no airline customers to a major US network running roughly a thousand aircraft on the service, several dozen at a Gulf carrier and around 200 at a European flag carrier. More than 2,000 additional aircraft are under contract. Roadmaps imply tens of thousands of satellites and tens of millions of users over time; reaching 30,000 satellites would require tens of billions of dollars in cumulative capital expenditure, but falling launch costs and maturing manufacturing keep unit economics in check.

Several other operators are positioning credible alternatives, each with a different theory of competitive advantage.

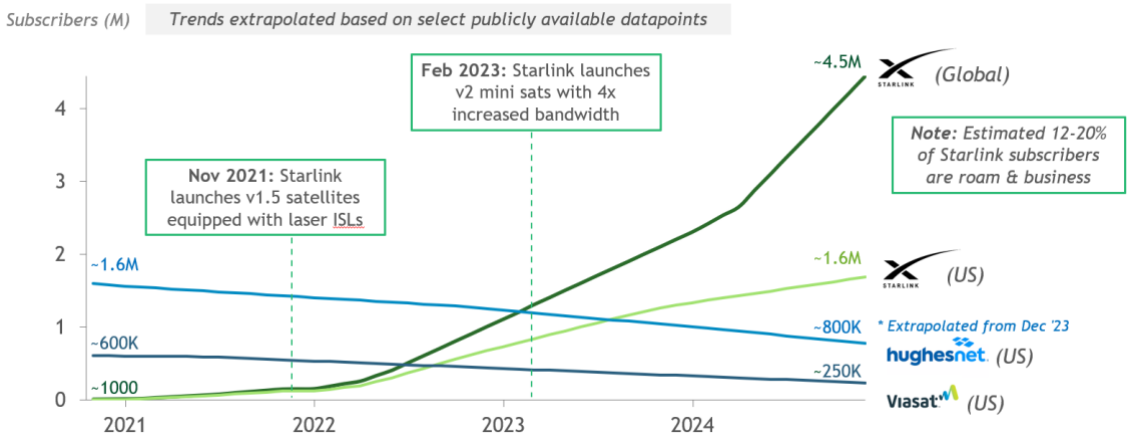


Exhibit 3: subscribers per GEO SatCom operator (2021-2024)

Amazon Leo and Blue Origin Terawave

Amazon Leo is moving from prototype to operational deployment, with its first two test satellites already in orbit. The differentiator is integration: Leo combines satellite broadband with AWS infrastructure and Amazon's logistics backbone, aiming to deliver connectivity tightly coupled with cloud, edge compute and content delivery. Within the same parent ecosystem, Blue Origin has announced Terawave, a planned constellation of more than 5,000 satellites targeting enterprise, data centre and government customers.

Telesat Lightspeed

Telesat Lightspeed is an enterprise- and government-focused LEO constellation backed by the Government of Canada. The system, comprising close to 200 satellites, emphasises secure broadband and managed services rather than mass-market retail. First launches are scheduled for mid-2026.

Eutelsat-OneWeb

Eutelsat operates a complete LEO network of around 648 satellites following its merger with OneWeb. Combined with the legacy GEO fleet, the company offers multi-orbit connectivity that pairs LEO latency with GEO coverage. The hybrid model has gained traction in enterprise and government markets across Europe, in maritime, and in aviation, even though OneWeb's standalone revenue, around 86 million dollars in 2024, remains modest.

IRIS²

IRIS² is Europe's sovereign answer. Designed as an €11 billion public-private initiative led by the European Commission, it will create a secure multi-orbit network for governmental, defence and commercial users. IRIS² explicitly builds sovereignty features (assured access, data prioritisation, accreditation) into the service layer, while leveraging private capital and industrial participation from member states. It is as much an industrial policy programme as a commercial constellation.

The competitive map that emerges from these moves is not a winner-take-all market. Starlink's lead is large and probably durable in mass-market consumer broadband and in standardised aviation in-flight connectivity. But sovereign customers will not concentrate critical communications on a single private actor in another jurisdiction, and large enterprises increasingly want a second path. Telesat Lightspeed, Eutelsat-OneWeb, Amazon Leo and IRIS² are positioning, each in different ways, around the segments where Starlink's vertical integration is a feature for some customers and a problem for others. Several combinations of orbit, integration model and government backing now look capable of producing sustainable economics. The map of which ones will survive at scale is still forming.

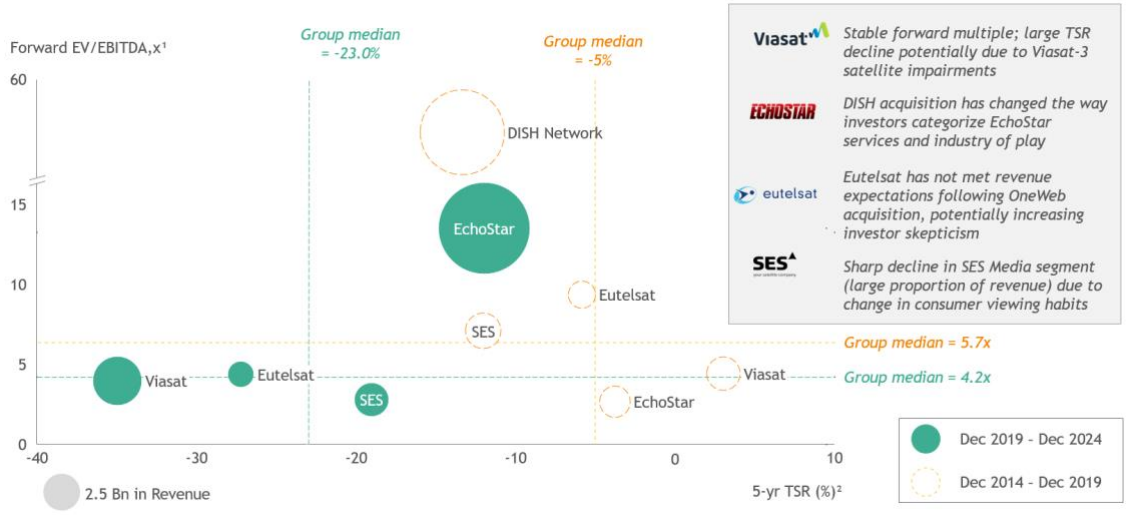


Exhibit 4: total shareholders return vs forward EV/EBIT (EoY 2024)

Outlook: opportunities for fast movers

Three verticals stand out as the largest pools of incremental value over the next five to seven years. None is purely a satellite story; each requires a particular combination of space asset, terrestrial integration, regulatory positioning and customer capture.

In-flight connectivity

Global air travel has fully recovered from the pandemic. 2024 saw an estimated 4.7 billion passengers, narrowly above the 2019 peak of 4.5 billion, and forward demand is resilient with mid-term passenger growth above 4 percent annually. What passengers do in the air is also broadening. Messaging and social media are now baseline; browsing and streaming are the fast-growing layer; live business applications such as video meetings and collaborative work are emerging. Willingness to pay rises with flight duration, and long-haul routes generate the strongest monetisation.

The supply side is in transition. Around 2014, only one in ten aircraft worldwide carried an active in-flight connectivity system. By 2024 the global fleet average is closer to one in three, with North America well ahead. Credible scenarios put global penetration above 50 percent within a decade, driven both by replacement of ageing first-generation systems and by greenfield installation on previously unconnected aircraft. For service providers, that points to opportunity across more than 900 airlines.

The competitive contest is unusually open. Incumbents such as Panasonic, Thales, Viasat, SES and Eutelsat are advancing multi-orbit and high-throughput offers. Several large airlines have already committed to Starlink. The combination of a fragmented airline customer base, long contract cycles, complex installation economics and rising passenger expectations creates space for multiple winners, but also for sharp losers among integrators that fail to differentiate.

Direct-to-device services

Roughly one third of Earth’s landmass has cellular coverage today, leaving even advanced economies with significant gaps; the United States alone has up to 20 percent of its territory without 4G. Globally, around 2.7 billion people remain without mobile connectivity. Non-terrestrial networks, the integration of satellite assets with terrestrial mobile networks, are positioned to close that gap.

The segment is real but still early. Most live use cases involve low-bandwidth services such as emergency messaging, and the monetisation model is unproven beyond opportunistic premium tiers. Spectrum harmonisation, regulatory alignment and the unit economics of bandwidth-intensive services to consumer devices remain genuinely difficult.

The competitive landscape is moving fast. EchoStar exited the race in 2025, selling its spectrum holdings to SpaceX and reinforcing Starlink's position with more than 600 D2D-capable satellites and access to S- and T-band spectrum. Lynk and Omnispace agreed to merge with backing from SES, creating a more integrated player combining L-band spectrum and a multi-orbit architecture. Viasat and Space42 formed Equatys, a joint venture pursuing multi-orbit, multi-band D2D opportunities, initially targeting the Middle East and emerging markets. Globalstar continues to provide focused safety services for Apple's iPhone emergency connectivity, while AST SpaceMobile is positioning as the most ambitious broadband-grade player in the segment.

For mobile network operators, two opportunities arise. The first is revenue from previously unaddressable users and usage in uncovered geographies. The second is meaningful cost optimisation, by extending coverage through satellite rather than additional towers and fibre. The economics flip in favour of the integrated solution at remote-density thresholds where terrestrial extension is no longer viable.

Sovereign constellations and partnerships

The geopolitical case for sovereignty has hardened over the past three years. Defence and security concerns are pushing governments to reduce dependence on foreign commercial assets, and the war in Ukraine made the strategic vulnerability concrete: when access to commercial SatCom or Earth observation services was constrained for political reasons, it became evident that sovereignty has direct national security consequences.

Europe is leading with IRIS². Germany is moving ahead with SatcomBW Stage 4 and Italy is considering an independent national constellation to complement European infrastructure and guarantee secure channels. Canada is funding Telesat Lightspeed. Beyond next-generation flagship constellations, several middle powers are exploring more cost-effective options that pair sovereign demand with smaller GEO platforms such as Astranis MicroGEO and SWISSto12 HummingSat.

Two opportunities stand out for those positioning around sovereign demand. The first is anchor-customer contracting that guarantees priority service and catalyses financing for the underlying infrastructure. The second is dual-use commercialisation from day one, structuring sovereign assets so that they are fully utilised, generate commercial revenue alongside government use, and avoid the political risk of an underused capability paid for entirely by the taxpayer.

Key actions to initiate

Operators and manufacturers

Most operators have settled the question of whether to engage with LEO. The harder question is how. Vertical integration, partnership and selective wholesale procurement each have a place; few operators will succeed by trying to do all three at scale. The priority is to identify two or three strategic bets where the company has a credible right to win, whether that is a vertical such as direct-to-device, a service-layer capability such as multi-orbit traffic management, or a regional sovereign play. Most incumbents need to be more concentrated, not more diversified.

Industrial users

For airlines, telecommunications operators, logistics, energy and defence primes, satellite connectivity is now a strategic input, not a back-office line item. The right starting point is a structured assessment of multiple non-geostationary operators on performance, pricing, coverage and commercial terms, alongside business cases that quantify both incremental revenue from new services and cost optimisation from replacing or augmenting terrestrial infrastructure. An explicit make-partner-buy strategy across terminals, platforms and network integration matters more than any single vendor decision; left to accumulate through individual contracting, it tends to default to the path of least resistance, which is rarely the right one.

Institutions and governments

National civil and defence use cases need a structured assessment that maps bandwidth, latency, peak demand, spectrum, resilience and security requirements. Cross-border and cross-programme cooperation, modelled on major defence collaborations, is consistently undervalued at the planning stage and overvalued at execution. Policy and procurement levers can support dual-use, commercially viable designs from day one, and private capital can be leveraged alongside public funding to scale the asset.

Investors

The right map runs from terminals and user equipment through satellite platforms, ground networks and service integrators. Investment theses that explicitly price technological, regulatory and spectrum risk, sovereign programme exposure and dual-use demand outperform those built on traditional infrastructure assumptions. The richest opportunities cluster around consolidation inflection points and key technology milestones, particularly on platforms with visible anchor demand and credible paths to cash generation.

Closing

Space connectivity has moved into the strategic core of how the world communicates. The combination of viable LEO economics, hardened sovereignty politics and broadening customer demand has created the largest opportunity the sector has seen since deregulation. It has also created the largest set of risks. The companies, governments and investors that succeed in this cycle will be those that align government backing, industrial capability and commercial discipline within the next two to three years. Those that wait will find the strategic positions, and the customer relationships, taken.

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