SECTOR IN-DEPTH
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Satellite Services – Cross Region

Industry set for growth but operators face risks around overcapacity, technology

Summary

The satellite industry is growing. But stiff competition and technological advances pose risks to the operators we rate. These operators need to maintain high levels of investment, which is weighing on free cash flow for many. Government support and programs are emerging as credit positives for the industry, particularly in Europe.

» **The satellite industry is set for strong growth, but the operators we rate face rising competition because of the advance of Starlink and other rivals.** Novaspace, a space sector consultancy, expects connectivity revenue will grow to $23 billion by 2033 from $7 billion in 2023. The operators we rate will benefit from this expansion through strategies including multi-orbit alliances and acquisitions. However, they face risks around overcapacity, although the business segments that these operators are focused on offer some mitigation.

» **The satellite industry's credit landscape is increasingly shaped by high capital intensity, weighing on cash flow generation**. Operators like SES S.A. (Baa3 negative) and Eutelsat Communications SA (B2 review for upgrade) are navigating multibillion euro investment cycles although SES is past the peak of its capital spending. Telesat Corporation (Caa2 stable) started constructing its 156 low Earth orbit (LEO) satellite constellation (Telesat Lightspeed) in 2024 at a cost of $3.8 billion, with launches set to start in 2026 and services in 2027. Viasat, Inc (B2 stable) is nearing completion of its Viasat-3 satellites, while its subsidiary, Inmarsat is also working on the Global Xpress 7, 8 and 9 satellites, set to enter service in 2027. While these initiatives aim to support long-term deleveraging and strategic positioning, they also introduce significant execution and integration risks. Iridium Satellite LLC (Ba3 stable) is the most well-positioned because the company launched its LEO constellation in 2019 and is therefore on a capital spending holiday through 2030 while generating annual free cash flow after dividends in excess of $200 million.

» **Sovereign support and regulatory alignment are emerging as credit positive developments in the satellite industry, particularly in Europe.** Government-backed programs such as the EU's IRIS², NATO's Medium Earth Orbit Global Services (MGS) and US Department of Defense contracts are anchoring long-term revenue prospects and enabling operators to access preferential financing. These public-private partnerships not only reinforce the strategic importance of satellite operators amid rising geopolitical tensions and defense spending, but also mitigate refinancing and execution risks.

Industry set for strong growth, but operators face higher competition, ongoing technology risk

The satellite industry is set for strong growth, but the operators we rate face rising competition because of the advances made by Elon Musk's Starlink and other rivals and ongoing risks because of developments in satellite technology. Novaspace, a space sector consultancy, projects that connectivity revenue, including fixed connectivity, mobility and government, will grow to $23 billion by 2033 from $7 billion in 2023, a compound annual growth rate of 13%. The operators we rate will benefit because the expected revenue growth will more than offset the ongoing strain in the video markets, which Novaspace expects to decline by 6% each year.

Novaspace also expects a significant increase in capacity, mostly from companies operating nongeostationary satellite orbit (NGSO) services. These include low Earth orbit (LEO) constellations from Starlink and Amazon.com Inc.'s (A1 positive) Project Kuiper, as well as the Chinese Guowang and Qianfan constellations, which are not yet operational (Exhibit 1). This poses a risk of overcapacity and will exacerbate pressure on bandwidth pricing, which continues to fall especially for broadband, backhaul and mobility applications.

Exhibit 1

Capacity from NGSO operators set to increase materially

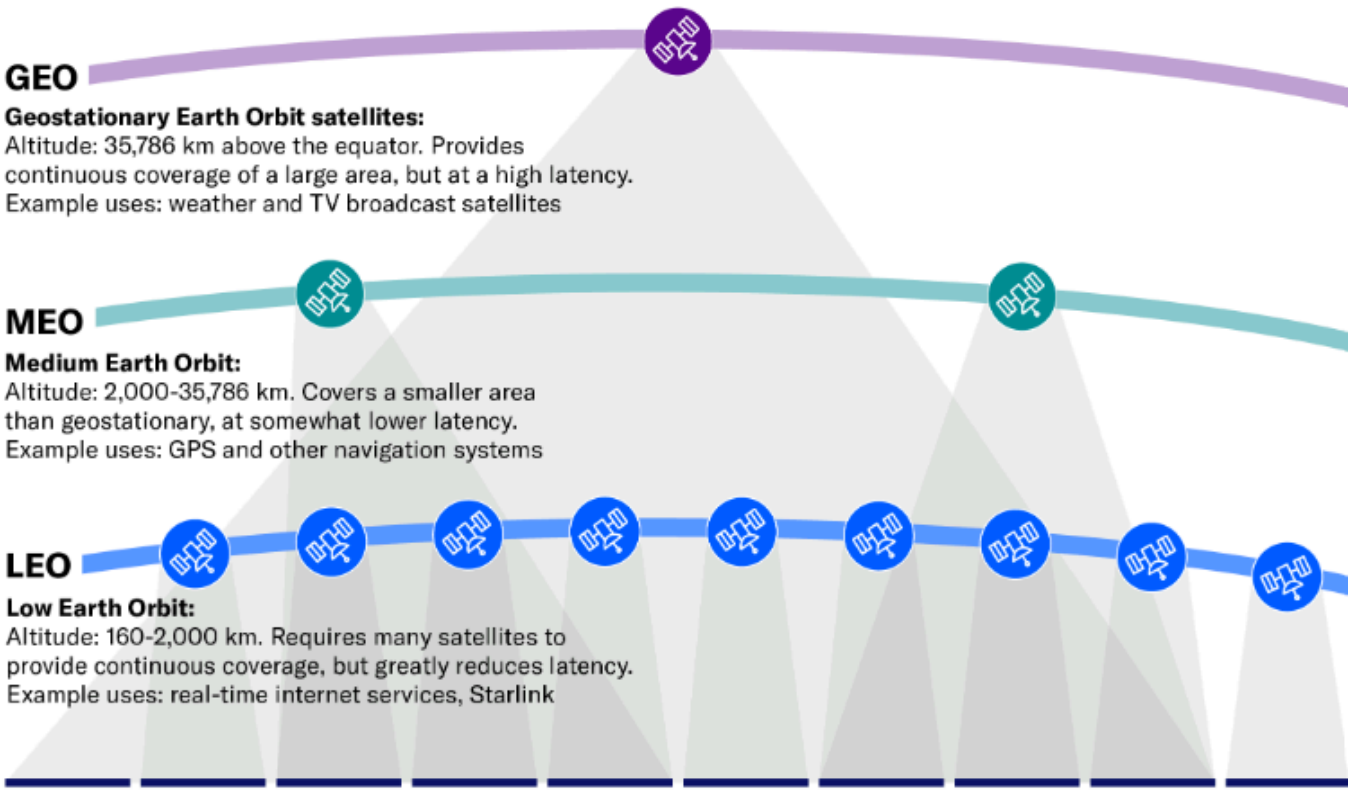
Expected launches of new constellations

Orbit Class	Company	Launch year	2024	2025	2026	2027	2028	2029	2030
LEO	Starlink	2021	GEN1	GEN2	GEN2	GEN2	GEN2	GEN2	GEN2
LEO	Eutelsat/OW	2023	GEN1	GEN1	GEN1	GEN1	GEN1	GEN2	GEN2
LEO	Amazon (proj.Kuiper)	2025		GEN1	GEN1	GEN1	GEN1	GEN1	GEN2
LEO	Telesat	2026			GEN1	GEN1	GEN2	GEN2	GEN2
LEO	Chinese constellations	2027	GEN1	GEN1	GEN1	GEN1	GEN1	GEN1	GEN1

Second-generation satellites offer greater bandwidth and higher speeds.
Source: Moody's Ratings

Compared with legacy geostationary (GEO) satellites, LEO satellites provide much lower latency and can offer higher data transfer rates and better signal quality because of their closer distance to earth (Exhibit 2). However, LEO constellations require more frequent replacement and need a large number of satellites to provide continuous global coverage because each satellite covers a smaller area than a GEO satellite.

Exhibit 2
LEO satellites can provide high-speed internet thanks to their proximity to the Earth



MEO altitude is mostly around 8,000 km
Source: Moody's Ratings

The increase in capacity is primarily in consumer broadband, which is not a target market for most of the operators that we rate, apart from Viasat, which has recorded significant subscriber losses in the face of competition from Starlink. Consumer broadband subscribers totaled about 172,000 as of 30 June 2025, down from a peak of about 603,000 as of 30 September 2020. Viasat's consumer broadband business accounted for close to 30% of revenue before it closed its acquisition of Inmarsat in May 2023 but it now contributes about 10%, including Inmarsat.

We had expected Viasat's new GEO satellites to allow the company to compete with Starlink in consumer broadband. However, the first of the three satellites, Viasat-3 F1, experienced an anomaly after launch in April 2023 that reduced its capacity below 10%, significantly limiting Viasat's prospects in consumer broadband. Viasat expects the F2 and F3 satellites to enter service in 2026, and expects that capacity from the F2 satellite should allow the decline in the consumer broadband business to level off. However, we believe the company will not be able to recover competitiveness in the consumer broadband business even when it restores satellite capacity. Because of the reliability and higher speed offered by Starlink, we do not expect Viasat to win back the subscribers it has lost.

Furthermore, there is a risk that some of the new surplus capacity could be redirected to other markets, such as maritime, aviation and government, potentially leading to overcapacity in those areas. Indeed, in some segments such as maritime and aviation, Starlink and other competitors are making inroads. For instance, Amazon's Project Kuiper constellation was initially intended to deliver internet to consumers and communities globally. However, JetBlue Airways Corp. (Caa1 stable) announced in September 2025 that it had selected Project Kuiper to provide connectivity and will be the first airline to install Amazon's technology on selected aircraft starting in 2027. We expect other airlines to consider this option.

However, the satellite operators we rate are seeking to offset the pressure on their connectivity business by providing value-added multi-orbit solutions, which should allow them to sustain or modestly increase revenue and EBITDA. Maritime, aviation, government and enterprise sectors benefit from the integration between orbits, which supports uninterrupted service. Multi-orbit services should also provide resiliency that military users are increasingly seeking.

For example, Eutelsat is currently the only company operating a multi-orbit GEO/LEO constellation with 35 GEO satellites and a fully deployed LEO constellation of over 650 satellites via OneWeb. That provides a combination of stable wide-area coverage from GEO satellites and high-speed, low-latency connectivity through LEO.

SES has developed a strategy combining GEO and medium Earth orbit (MEO) satellites. That supports the maritime business, for instance: a cruise liner can use MEO for high-speed internet while at sea but seamlessly switch to GEO if it moves out of MEO coverage. SES is also developing the Open Orbits Inflight Connectivity Network, which aggregates services from multiple operators and allows airlines to maintain passenger internet service across continents without being locked into a single provider. With the acquisition of Intelsat, its aviation business has substantially increased its size and service offering. SES also has some indirect LEO capabilities through a long-term partnership with Eutelsat as a result of a $250 million contract with Intelsat, which SES acquired in July 2025.

Viasat, a leader in in-flight connectivity (IFC), has also expanded its network to include multi-orbit capabilities, integrating their GEO fleet with third-party LEO satellites, including a Telesat Lightspeed contract in 2025. As a result, the company should gain its fair share of the growth in aviation despite competition from Starlink. As of 30 June 2025, Viasat covered 4,100 commercial and 2,050 business aircraft, up from 3,750 and 1,850, respectively, a year earlier. It also has agreements with airlines to install equipment on more than 1,500 aircraft. In July 2025, LATAM Airlines Group S.A. (Ba2 stable) selected Viasat Amara, a next-generation IFC service that will use both GEO and LEO with global coverage, for installation on long-haul wide-body aircraft. JetBlue, an existing Viasat customer, also plans to adopt Viasat Amara on new aircraft.

Viasat bought Inmarsat to gain exposure to the maritime market. However, the maritime business is more exposed to Starlink competition and has experienced some revenue pressures in the past few quarters. As of 30 June 2025, the number of maritime vessels serviced with Ka-band spectrum had fallen to 13,900 from 14,300 a year earlier. However, in 2024 Viasat launched NexusWave, a high-speed service that combines GEO and LEO services to offer always-on connectivity for vessels globally. Customer adoption has picked up and announced orders exceeded 1,000 vessels, with 190 vessels installed, as of 30 June. We expect NexusWave to return the maritime business to growth in 2026 and beyond.

Of the operators we rate, Iridium is likely the most insulated from competition from Starlink because of the safety services and mission-critical communications it provides via L-band spectrum, which provides more reliable connectivity and is in limited supply. Iridium's main business segments comprise commercial voice and data, commercial Internet of Things, broadband, government, equipment, and engineering and support. Broadband, which is less than 10% of consolidated revenue, is facing competition from Starlink tied to maritime services. Iridium is recording good growth in most other segments. We expect consolidated revenue to expand by a low single-digit percentage annually through 2030.

Smartphone satellite connectivity, known as direct-to-device (D2D), is a growth area where Iridium has been investing, although commercialization will not occur until 2026 or 2027. Our low single-digit revenue growth expectations for Iridium do not include any benefit from D2D. However, this prospect has taken a hit because EchoStar Corporation (Caa2 review for upgrade) on 9 September 2025 announced the sale of AWS-4 and H-block spectrum licenses to Elon Musk's SpaceX for about $17 billion in cash and stock. With these licenses, SpaceX can build satellites that would allow Starlink to be a formidable competitor in D2D globally.

The satellite industry's credit landscape is increasingly shaped by high capital intensity, weighing on cash flow

The pace of innovation in satellite technology and related fields continues to accelerate. This means that satellite companies must continuously invest in new technologies to stay competitive, which can be costly and risky.

SES and Eutelsat are navigating multibillion euro investment cycles, driven by next-generation constellations and sovereign-aligned programs such as the EU's IRIS², although SES is past the peak of its capital spending. Meanwhile, Telesat started constructing its 156 LEO satellite constellation, Telesat Lightspeed, in 2024 at an estimated cost of $3.8 billion (about C$5.3 billion). Telesat expects

launches to start in 2026 and services to begin in 2027. Viasat is nearing completion of its Viasat-3 satellites at a cost of more than $2.5 billion, while subsidiary Inmarsat is also working on the Global Xpress (GX) 7, 8 and 9 satellites that should enter service in 2027. While these initiatives aim to support long-term deleveraging and strategic positioning, they also introduce significant execution and integration risks.

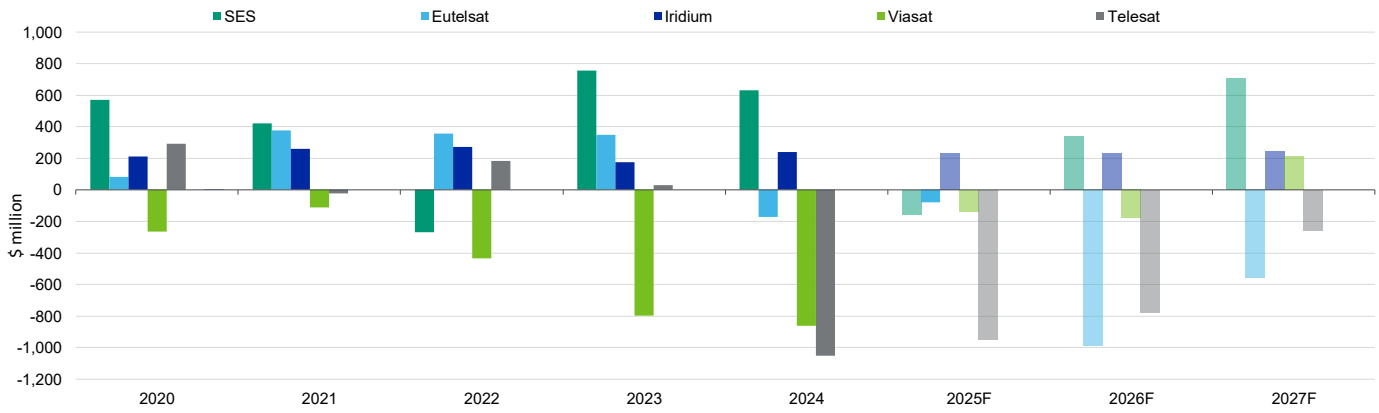
In terms of capital intensity and funding requirements, Iridium is the best positioned among the operators we rate because the company launched its 66 cross-linked L-band LEO constellation, which has a 20-year life span, in 2019. It is therefore on a capital spending holiday through 2030 while generating annual free cash flow after dividends in excess of $200 million. The company also has 14 spare satellites in orbit for additional capacity and redundancy. Iridium is also in a good position to build up cash for its next constellation if it does not renew its share repurchase program that ends in 2027. The program has a $1.5 billion authorization with $295 million remaining to repurchase.

Because of these high investment needs, we expect free cash flow (FCF) to remain weak over 2025-2027, in particular for Eutelsat and Telesat (Exhibit 3).

Exhibit 3

High capital spending will constrain cash flow generation in particular for Eutelsat and Telesat

Moody's-adjusted FCF generation



For SES and Eutelsat FCF given at an exchange rate of €1 = $1.15

Source: Moody's Ratings

Eutelsat is developing its LEO constellation and plans to invest €2 billion between 2025 and 2029 to ensure Generation 1 continuity and achieve global coverage, alongside an additional €2 billion from 2027 for the IRIS² program. The company is offsetting increased leverage by raising €1.35 billion in equity by the end of 2025. Eutelsat needs to scale OneWeb operations to achieve a recovery in earnings.

SES should return to positive FCF in 2026, primarily driven by a reduction in capital expenditures. However, this expectation might be ambitious because of the capital-intensive nature of the business and the ongoing need to invest in replacing old satellites and increasing capacity. SES also needs to make savings and restore earnings growth at Intelsat and reduce leverage after its acquisition. However the acquisition of Intelsat brings higher scale and a stronger combined position across different verticals.

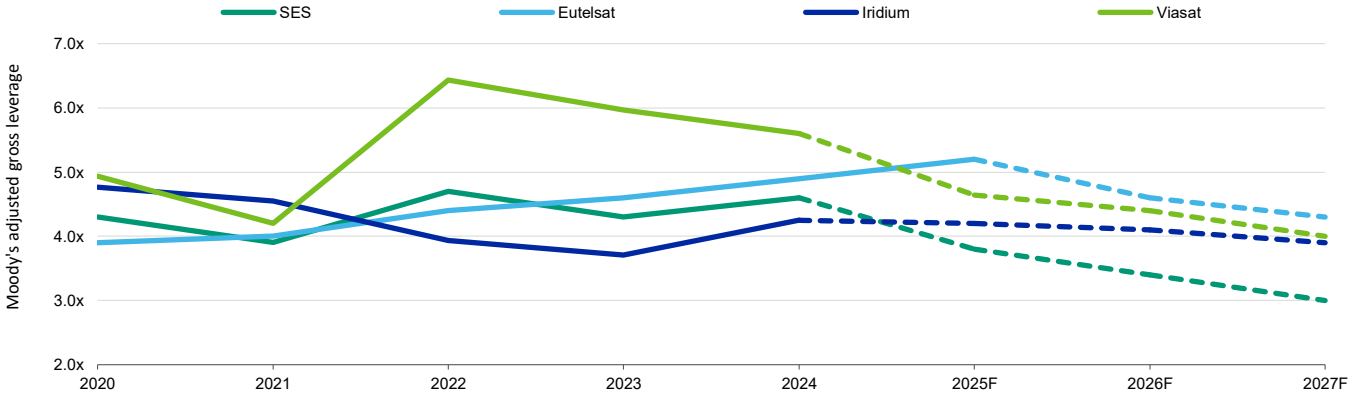
With Viasat expecting its F2 and F3 satellites to enter service in 2026, we expect the company to generate annual positive FCF starting in 2027. Telesat expects service for Telesat Lightspeed to begin in 2027 so we expect positive FCF generation starting in 2028.

Despite weak FCF prospects, Moody's-adjusted leverage should improve modestly across the companies we rate (Exhibit 4), thanks to the modest earnings increase we expect, driven by stronger volumes in connectivity segments, contributions from synergies and benefits from operating leverage thanks to bigger scale.

Exhibit 4

Earnings growth should support deleveraging for all the operators we rate

Moody's-adjusted gross leverage



Telesat is excluded because its forecasts are not meaningful; the company's debt will increase to construct the LEO constellation, with no material EBITDA contribution until after 2027

Source: Moody's Ratings

Sovereign support and regulatory alignment are emerging as credit positives, particularly in Europe

Government-backed programs such as the EU's IRIS² and NATO's Medium Earth Orbit Global Services (MGS) as well as US Department of Defense (DoD) contracts are anchoring long-term revenue prospects, enabling satellite operators to access preferential financing and providing opportunities for higher profitability and diversification. These public-private partnerships not only reinforce the strategic importance of satellite operators amid rising geopolitical tensions and defense spending, but also mitigate refinancing and execution risks.

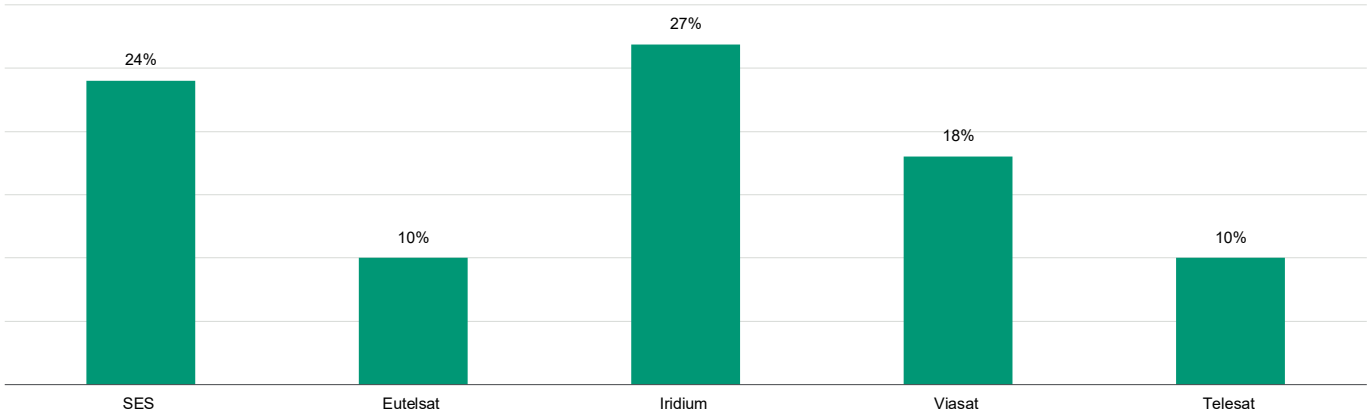
We expect revenues in the government segment to continue to grow, benefiting the satellite companies, thanks to a combination of strategic and technological factors. Geopolitical instability has accelerated demand for resilient, secure communications; that further supports stronger government demand for the satellite companies.

All the rated operators derive significant revenue from the government business (Exhibit 5). This typically includes a mix of contracted services, infrastructure leasing and managed solutions tailored to defense, intelligence and government agencies. Government business tends to be more profitable than aviation and maritime because governments have more specific and regulated requirements, prioritizing reliability and security over cost, allowing satellite companies to charge premium rates.

Exhibit 5

Government revenues are significant for the satellite operators we rate

Share of revenues generated by government business



Share of revenue generated from government business likely to increase for Eutelsat following the OneWeb contribution

Sources: Company data and Moody's Ratings estimates

Novaspace estimates that worldwide government expenditures for space defense and security activities totaled $58 billion in 2023. Of this, about $40 billion was contracted to industry, primarily for the procurement and launch of proprietary satellites, supply of user terminals and for commercial products, data and services. Intelligence, surveillance and reconnaissance and secured satellite communications account for a large part of the $40 billion and are the main sources of revenue.

The EU's IRIS² project is for both civil and military purposes and is a significant development for European operators, particularly SES and Eutelsat. The €10.6 billion project is around 60% funded from public sources such as the European Commission, EU member states and the European Space Agency. The remaining 40% will be covered by the project consortium, with SES investing up to €1.8 billion and Eutelsat up to €2 billion from 2027. The European Commission will act as the anchor tenant over a 12-year concession contract. This initiative is positive for SES and Eutelsat because it provides substantial public funding and additional satellite capacity, generating potential revenue opportunities of €6 billion for each company, primarily from 2030.

The MGS program (Medium Earth Orbit Global Services) originally established in October 2022 was a major strategic initiative led by Luxembourg, the U.S., and NATO, with significant implications for SES. The US DoD has awarded several major satellite contracts to commercial providers in recent years, in particular Intelsat and Viasat, reflecting a strategic shift toward integrating commercial space capabilities into military operations.

Government support, both direct and implicit, is also an important factor for some of the operators we rate. In July 2025, we placed Eutelsat's ratings on review for upgrade in part because the government of France (Aa3 stable) is increasing its ownership stake to approximately 30%. Furthermore, in June 2025, Eutelsat secured a €1 billion, 10-year contract with the French Ministry of Armed Forces. This includes priority access to LEO capacity, ability to host secondary payloads for governmental missions, funding to upgrade the constellation for military use and support for France's NEXUS program focused on sovereign satellite communications.

SES's credit quality has historically benefited from implicit support from the government of Luxembourg (Aaa stable), which directly and indirectly holds an aggregate stake of around 20%. This provides a one-notch uplift to SES's rating, underpinned by the track record of support from the Luxembourg government and the increased importance of the company for Luxembourg and Europe in a more uncertain geopolitical environment where SES plays an important role because of its government business.

Among the North American operators we rate, Telesat is the only one with direct government funding for its satellite construction. Telesat has a viable long-term business because the company received support from the government of Canada (Aaa stable), allowing Telesat Lightspeed to commence. The national government provided a C$2.14 billion loan and the government of the Province of Quebec (Aa2 stable) added a C$400 million loan, which together accounts for about 47% of Telesat Lightspeed funding. Telesat also secured the first contract for Telesat Lightspeed from the government of Canada, which would generate about C$1.2 billion in revenue over 10 years. Since then, the company has signed contracts or reached agreements with Viasat, Orange (Baa1 stable), ADN Telecom Limited and Arab Satellite Communications Organization. We consider Telesat to be well positioned to sign contracts over time because of the Canadian government's support.

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