

Understanding Communication Industry

Wired communication Infrastructure is backbone of India's network connectivity, especially in urban and semi-urban areas. Communication services through cables and wires in India have evolved significantly over time from early telegraphy using copper wires to modern fiber-optic networks, reflecting advancements in technology and infrastructure. Recent years have focused on expanding fiber-optic infrastructure through initiatives like BharatNet, enabling high-speed broadband and supporting technologies like 5G. Today, fiber optics dominate India's communication landscape.

A **fiber optic network** transmits data as light pulses through optical fiber cables, enabling high-speed, low-latency internet crucial for 5G deployment. Telecom towers, connected via these cables, convert electromagnetic waves from phones into electrical signals, which are transmitted through fiber networks to destination towers. Major providers like Reliance JioFiber, Airtel Xstream, and BSNL have extensively expanded fiber infrastructure across cities and towns.

Fiber optic networks faces several challenges such as:

1. **Geographical challenges** – Laying telecom towers and fiber optic cables face difficulties in reaching remote areas like rural, hilly, and marine regions due to geographical, logistical, and economic challenges.
2. **Scalability issues** - Expanding fiber networks to meet increasing demand for high-speed connectivity requires substantial investment in infrastructure upgrades and densification of networks. The lack of extensive fiber infrastructure is attributed to high installation costs, regulatory hurdles, and economic unviability in rural areas.
3. **Physical damage** – Towers and cables are fragile and prone to damage due to construction activities, natural disasters which leads to signal loss or complete network failure.

To overcome these challenges, **Satellite communication** is emerging as alternative and reliable solution for remote areas where laying fiber infrastructure is impractical. Satellite communication services use satellites to enable communication across regions or globally, including within Closed User Group (CUG) networks. They relay signals over long distances, effectively overcoming geographical challenges like mountains and remote areas. It enables direct data transfer via satellites, avoiding the high costs and complexities of physical networks. With advancements like low Earth orbit (LEO), spot-beam, and high-throughput satellites, bandwidth has increased significantly while remaining affordable. Satcom is quick to deploy, highly reliable for critical applications like ATMs and naval systems, and resilient to natural disasters. Additionally, it offers enhanced security through encrypted communication between VSAT terminals and satellites, making it harder to intercept or hack.

Major Components used in satcom services:

1. Satellite dish to transmit and receive signals from user end (Eg: VSAT)
2. Satellite acts as a relay station by receiving, amplifying and retransmitting signals between users or devices on Earth. Satellites contain Transponders (processor device), Antennas (to direct signals to specific geographic areas) and Solar Panels.
3. Ground stations acting as the primary interface between satellites in orbit and terrestrial networks.

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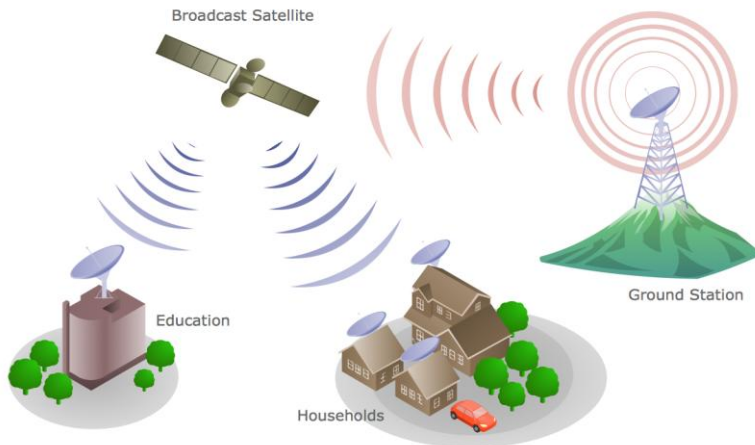
Satellite communication networks can be designed based on specific needs using Star, Mesh, or Hybrid topologies.

In **Star topology** (e.g., used by Nelco), communication follows three steps:

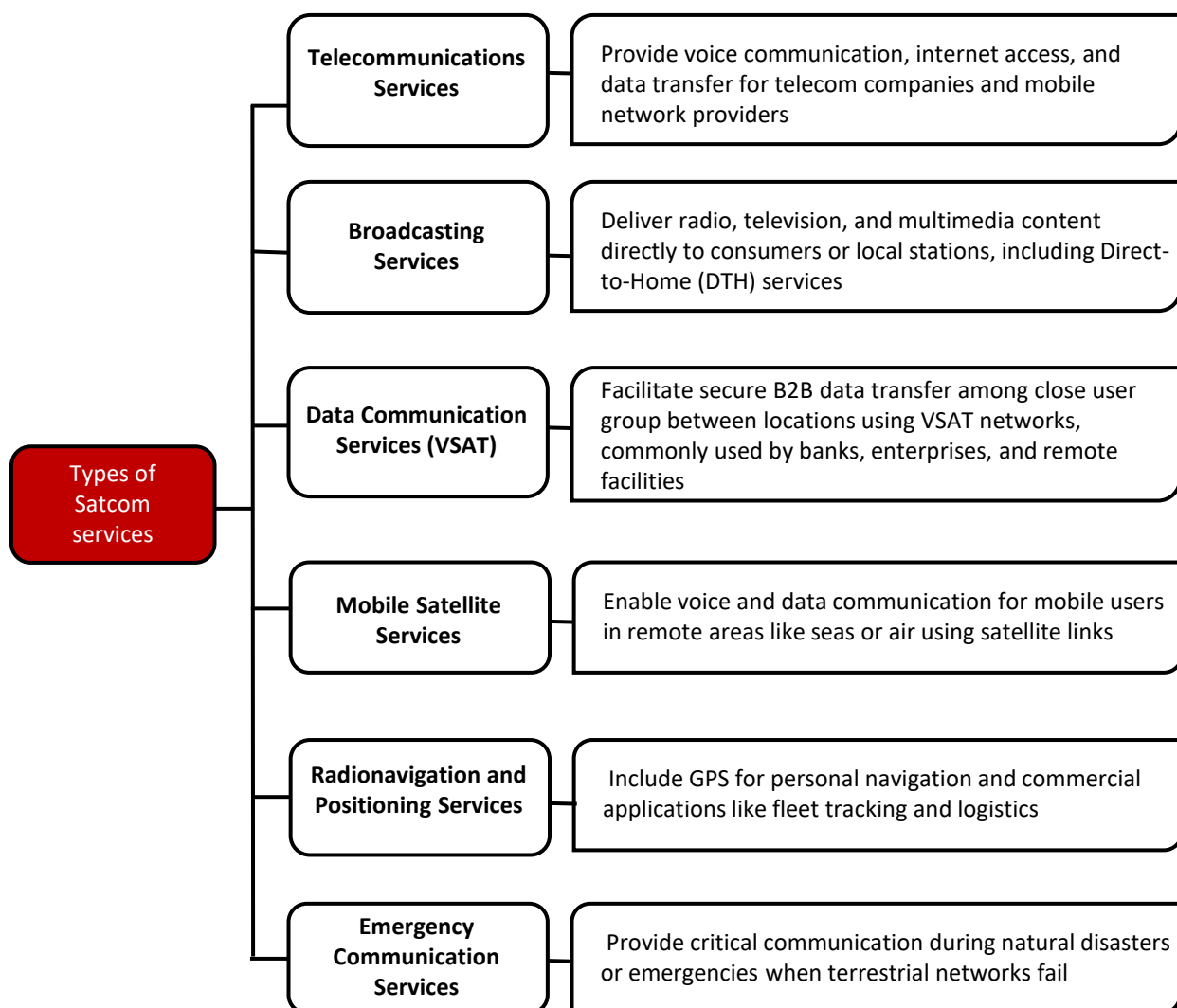
1. Uplink – This is 1st step. The user's device (e.g., computer) connects to the indoor unit of the VSAT terminal. The indoor unit processes the data, which is then sent to the outdoor unit (VSAT dish). A signal is transmitted from VSAT dish to the satellite in orbit.
2. Transponder – A device in communication satellite that acts as a communication channel between the satellite's receiving and transmitting antennas. Primary function is to amplify the weak signals received from Earth (uplink signals) to ensure that they are strong and frequency translation.
3. Downlink - The amplified signal is then retransmitted back to ground station on Earth. Then ground station process and send it to another VSAT.

The process flow is: VSAT → Satellite → Ground Station → VSAT.

In **Mesh topology**, VSATs communicate directly with each other via the satellite, eliminating the need for a ground station (VSAT → Satellite → VSAT).



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Growth drivers of Satcom industry

- **Industry growth and government support** - India's Satcom industry is growing rapidly, supported by the 2023 Telecom Act and Indian Space Policy, which enable private participation and streamline satellite spectrum allocation. These reforms aim to boost India's share in the global space economy, driven by rising demand for data, remote connectivity, and digital services.
- **Increase need of Maritime and Aviation Connectivity** - The maritime and aviation sectors are witnessing rising demand for high-bandwidth SatCom solutions to enhance navigation, safety, and passenger connectivity. In India, the government authorized In-Flight and Maritime Connectivity (IFMC) services in 2018, allowing airlines and shipping companies to partner with Indian IFMC licensed providers. While international airlines have adopted these services, domestic airlines have been slower to implement them. A 2024 amendment streamlined in-flight Wi-Fi rules, paving the way for broader adoption in the domestic aviation sector, which is expected to embrace IFC services widely within 2 years. This presents a significant growth opportunity for SatCom services in India.

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- **To increase Rural and under-served areas connectivity** - India, despite having the second-largest mobile connections, highest digital payments, and fastest 5G rollout, still faces connectivity gaps in remote areas due to infrastructure challenges. Satellite communication offers a cost-effective, scalable solution to bridge this gap, enabling rapid, reliable, and flexible connectivity to drive socio-economic development, financial inclusion, skill development, and healthcare access across all terrains.
- **Defense and security applications** - India's land and marine border areas face communication challenges due to limited infrastructure, making SatCom vital for defense and security. It supports military communications, border and maritime surveillance, disaster response, and intelligence gathering, addressing critical operational needs.
- **Increase in IoT connectivity** - The growing adoption of IoT across industries like agriculture, transportation, healthcare, and manufacturing offers a key opportunity for SatCom. Satellites enable seamless data transmission in remote or underserved areas, ensuring reliable connectivity for IoT applications where terrestrial networks are unavailable.
- **Disaster recovery and emergency response** - Satellite communication is critical during natural disasters and emergencies, providing resilient connectivity when terrestrial networks fail. It enables quick restoration of communication, supporting emergency response, remote monitoring, and coordination efforts.
- **Increase need in critical business applications** – Need for Satcom services will increase with increase need of faster, secure and smooth network connectivity in critical business applications like increased need of ATMs, bank branches, oil and gas exploration, etc.
- **Faster broadband internet services** - SatCom can meet the growing demand for high-speed internet by providing broadband services to consumers and businesses in urban, semi-urban, and rural areas. The importance of internet service from Satcom can be inferred from below difference:

Basis	Satcom Internet	Terrestrial Internet
Technology	communicates with a satellite to provide internet connectivity	Relies on terrestrial infrastructure like fiber-optic cables, DSL, or cable networks to deliver internet.
Speed	Faster	Lower
Reliability	More reliable	Less reliable, due to disruptions due to weather conditions like heavy rain or snow
Coverage	Global coverage, including remote regions, maritime locations, and areas without terrestrial infrastructure.	Limited to areas with existing terrestrial infrastructure like cities and towns
Cost	Higher set up and operating	Lower
Used by	Remote businesses (e.g., oil rigs, ships, aviation), Critical application business (Banks), disaster recovery, rural communities	urban/suburban homes, offices, and businesses

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- **Emerging satellites** - Satellite communication primarily relies on three types of satellites: GEO (Geostationary Earth Orbit), MEO (Medium Earth Orbit), and LEO (Low Earth Orbit).

Basis	GEO	MEO	LEO
Altitude range above earth's surface	500 - 2,000 Km	2,000 – 35,786 Km	Above 35,786 Km
Network Latency	High	Moderate	Low
Signal strength and speed	Low	Moderate	High
Coverage	Wide	Lower than GEO	Small area
Application	Mainly used for Broadcasting (TV, radio), weather monitoring, etc.	Mainly used for Navigation systems (GPS, Galileo), mobile and broadband communication	Mainly Used for Real-time communication (e.g., video calls), IoT, etc.

In India, satellite communication has traditionally depended on GEO satellites, including VSAT networks, but their high latency limits modern applications. There is **growing interest in LEO** and MEO satellites, with LEO services expected by FY25, promising lower latency and faster speeds. Additionally, **High Throughput Satellites (HTS)** are revolutionizing connectivity. They cost ~50% more than traditional satellites but offering over 100 times the capacity of traditional satellites resulting in significantly lower costs per bit, driving bandwidth expansion and price reductions.



Satcom is not trying to replace telecom networks: Nelco CEO

On the back of low earth orbit (LEO) satellites, the satcom services market is set to grow over four times in the coming five years.



India poised to become a major Satcom hub by 2030



Nelco providing technology agnostic satcom services in the B2B Space

The company will continue to adopt newer satcom technologies best suited for various segments, customers and applications.

Business Today

How Satellite Communications could Propel the Next Boom in the Telecom Space



Satellite communication may act as a frontline service: Trai's Raghunandan

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License and Transponder charges

The Satcom industry enjoys strong gross profit margins, but high operating expenses, including transponder charges and multiple licensing fees, impact operating margins.

Key licenses include

- **SESG license** (₹10 lakh entry fee for 20 years) for setting up Earth Station Gateways for advanced satellites like HTS, MEO, and LEO
- **VSAT license** for providing VSAT services
- **IFMC license** for inflight and maritime connectivity in India
- **Other license** based on specific Satcom services like GMPCS (global mobile personal communication by satellites)

VSAT and IFMC License holders have to pay one time application/entry fees and must also pay annual license fees, revenue share based on adjusted gross revenue, additional fees for spectrum usage charges and space segment usage. VSAT operators are mandated to lease **transponder space from Antrix Corporation** (ISRO's commercial arm), which prioritizes domestic satellite capacity. If insufficient, foreign satellite capacity can be leased with as long as they operated under valid agreements with Indian entities such as NSIL/Antrix. However, Indian space regulations changed and now the new rule is as under:

Effective April 2025, non-Indian satellite operators must secure explicit fresh authorization from IN-SPACe (single window agency) in coordination with DoT to provide space-based communication services in India. This means only In-space authorized non-Indian satellites will be permitted to provide space-based services. Ensuring stricter regulation and alignment with national space policy objectives.

Existing agreements will remain valid until March 31, 2025.

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Nelco Business understanding

Nelco Limited, part of the Tata Group since 1940 and based in Navi Mumbai, is a **leading provider of VSAT-based satellite communication services in India**, catering to government and enterprise customers across industries. The company delivers customized satellite solutions for CUG networks, turnkey communication networks for large organizations (especially in the government and PSU sectors), and high-tech security and surveillance systems. Nelco serves diverse sectors, including banking (ATMs), oil & gas, renewable energy, inflight and maritime connectivity, telemedicine, mining, construction, and rural education, with a strong market presence in oil & gas and banking segments.

Promoter and Management

Name	Position	About	Promoter/ Management
Tata Power Company Ltd	Parent Company	Having 50.04% stake	Promoter
Mr. A.S. Lakshminarayanan	Chairman	Aged 63, appointed on May 27, 2022, following Mr. R.R. Bhingde's resignation, he is a mechanical engineer from BITS Pilani with extensive expertise in the global technology market and enterprise digital needs. He serves as MD & CEO of Tata Communications Ltd and holds directorships in Tata Communications Ltd, Tata Teleservices Ltd, and Tata Teleservices (Maharashtra) Ltd. Previously, he was President and CEO of TCS Japan.	Management
Mr. P.J. Nath	MD & CEO	Aged 62, with a Master of Management Studies from BITS Pilani, he has extensive experience in the enterprise market, having held leadership roles for 26 years across IT and telecom companies like Wipro, Sify Technologies, and Tata Communications. His career spans diverse functions, including sales, product management, customer support, project management, and serving as Business Head and CEO. He also holds directorships in Nelco Network Products Ltd, Technopolis Knowledge Park Ltd, and Piscis Networks Pvt. Ltd.	Management
Mr. Malav Shah	CFO	CA with corporate experience of 25 years in aspects of Finance, Accounts and Audit including for large reputed & listed companies.	Management
Mr. Daniel A. Thomas	CBO		Management

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License

Nelco holds CUG VSAT license, IFMC license, National Long Distance (NLD) license, Class A Internet service provider, SESG license.

Services provided by Nelco

Company provides services to businesses and government organizations in following main areas:

1. VSAT Connectivity service: Offers satellite-based communication services using VSATs (small dish antennas) for reliable data, internet, and private networks in remote areas, ideal for industries like banking (e.g., rural ATMs), energy, and maritime operations.
2. Satcom projects: Provides end-to-end satellite communication solutions, including designing, setting up, and managing secure private or hybrid networks for government, defense, and corporate clients.
3. Network Maintenance - Maintenance of private VSAT networks, hybrid networks, and satellite communication infrastructure including on-site maintenance and complaint handling for VSAT systems, End-to-end management including upgrades and troubleshooting.
4. Integrated Security & Surveillance Systems: Delivers advanced security solutions like intrusion detection, access control, fire safety, and video surveillance for critical infrastructure such as industrial plants, airports, borders, and military installations.

Products provided by Nelco

1. Satellite dishes (VSAT dish), telecommunication wiring, computer network and cable television wiring (including fibre optic), other telecom services

The company's VSAT installations grew from around 48,000 in FY17 to over 76,000 by March 2022, including 45,000+ for ATMs.

2. End-to-End Security & Surveillance Solutions - Nelco Network Products Ltd (NNPL) designs, installs, and maintains customized security solutions like intrusion detection, access control, fire safety monitoring, centralized command centers, and intelligent analytics for applications like industrial plants, power stations, airports, railways, seaports, and borders.

Provides covert intrusion detection for borders and electronic security systems for critical defense facilities like ammunition depots and naval bases.

2 Main revenue stream of Nelco

- **VSAT hardware sales** - This is a one-time income from selling and installing the satellite equipment (like antennas and terminals) needed for VSAT communication to access satellite communication service. Company does not manufacture this hardware itself but relies on advanced technologies from global suppliers like VT iDirect and Gilat Satellite Networks and also procures 30% of the components from local sources.
- **Bandwidth and Service Usage** - Company's main source of income, making up ~70% of its total revenue. It comes from customers paying regularly for using satellite bandwidth and related services to transmit data via satellite. For satellite transponder space, depended on solely ISRO Antrix.

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Revenue Mix

Breakup	FY24	FY23	FY22	FY21	FY20
Sale of Bandwidth (Satcom service)	69%	63%	78%	~75-80%**	NA
Sale of Equipment	14%	20%	22%*	~17%*	NA
Installation and other services like annual maintenance contract	13%	11%	NA	NA	NA
Rental of VSAT (who prefer not to purchase VSAT equipment)	4%	4%	NA	NA	NA
Other	0.02%	0.14%	NA	NA	NA

* Data from income statement from respective annual report

** Data from credit rating report April 2022

Export revenue

FY24	FY23	FY22	FY21	FY20
30%	27%	18%	12%	0.15%*

* Data from Ace equity, NA in annual report

Customers

Company terms with its customers are largely contractual in nature, with contract lengths varying from 1 to 3 years. Provide satcom services to:

Banking: Bank branches, ATMS, Managed service providers.

Oil, Energy and Gas: Oil retail companies and Petrol Pumps, Solar farms, Hydro farms, Wind farms, Offshore and onshore rigs. Further, NELCO has also entered into 3-5 year non-cancellable lease agreements with oil retailers such as IOCL, BPCL and HPCL, which provides stable lease rentals at attractive IRRs

WiFi on aircrafts and Maritime communication, Telecommunication, and manufacturing companies



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Tata's Nelco bags contract worth Rs 40 cr from ONGC to enhance communication infrastructure

Under the contract terms, Nelco will supply, commission, and maintain ONGC's very small aperture terminal (VSAT)-based network. This network will also be used to enhance the communication infrastructure of ONGC's offshore sites in Western India, according to an official release.



In-flight Internet tariff may be bundled with flight tickets: Tata's Nelco

As one of the pioneers in Inflight Communication services in India, we are geared up to start working with Domestic Airlines and provide best-in-class connectivity.

Organisation structure and Restructuring

Wholly owned Subsidiaries

Tatanet Services Ltd (TNSL) - Nelco's WOS, Tatanet Services Ltd (TNSL), which held licenses for VSAT and Internet service provider services, was amalgamated with Nelco on June 9, 2021, following DoT approval for license transfers as per the NCLT order dated November 2, 2018.

Nelco Network Products Ltd. (NNPL) - In FY22, Nelco transferred two businesses to NNPL via slump sale: (i) Industrial Security and Surveillance Systems (ISSS) and (ii) Sale and maintenance of VSAT and related equipment. NNPL also holds the Inflight and Maritime Communication (IFMC) license.

Restructuring

Nelco restructured its operations in two phases:

first, transferring the ISSS and Satcom equipment businesses to NNPL via slump sale, and

second, amalgamating TNSL with Nelco.

Post-restructuring, Nelco now houses the satellite communication services (with VSAT and ISP licenses), while NNPL manages the equipment business. Both entities hold IFMC licenses to serve respective customer segments. This restructuring enhances Nelco's ability to bid for larger projects, pursue bigger opportunities, and improve overall efficiency in asset and employee utilization.

Associate

Piscis Networks Pvt. Ltd. (PISCIS) - In June 2023, Nelco acquired a 9.09% stake in Piscis Networks Pvt Ltd, an SD-WAN technology OEM, for ₹1 crore and increased its stake to 31.72% in September 2023 with an additional ₹2 crore via a rights issue. SD-WAN enables cost-effective and efficient connectivity by optimizing multiple internet connections (e.g., broadband, 4G/5G, satellite) and replacing expensive private networks like MPLS. Nelco is also planning to expand its services globally.

	FY24	FY23	FY22	FY21
Revenue	8.09 Cr (2.5%)	1 Cr (0.3%)	NA	NA
PAT	2.33 Cr (9.7%)	0.47 Cr (2.35%)	NA	NA

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Tagline and Mission

"Creating a world where 'remote' as a terminology does not exist"

"Enabling 'Digital Acceleration' even in remote areas with new-age Satcom Services"

"Bringing the benefits of the digital revolution to unserved and under-served customers"

"To be the most customer-centric digital solutions provider benefitting businesses and consumers, using satellite communications"

India's leading and Innovative Satellite Communication service provider. Company's mission are:

1. Building a digital world...in the skies
2. Enabling access to business-critical applications at sea
3. Enabling financial inclusion and extending reach of Govt. programs
4. Extending the reach of telecom in difficult-to-serve (remote) regions
5. Expanding the reach of quality education to remote areas
6. Providing critical communication in disaster-affected areas

Strength and Opportunities in Nelco

- Growing Satcom Opportunities: Rising demand for ATMs, banking branches, and enterprise connectivity is driving the need for high-speed, low-latency, and reliable networks to ensure seamless operations, even in remote and inaccessible locations.
- Strong market position in niche VSAT industry - Nelco is a key player in the ₹1,000 crore Indian VSAT industry, with a market share rising from ~24% of the installed base of VSAT in FY20 to ~27% in FY24 and revenue share in industry revenue increasing from 30% to 34% during the same period. Nelco is market leader in providing seamless connectivity for India's Oil & Gas sector and secured a ₹40 crore deal with ONGC in FY23 for its VSAT network. Nelco is also a prominent player in In-Flight and Maritime Communications (IFMC), enabling Wi-Fi on 1,500+ international aircraft over India and expanding into domestic aviation. IFMC revenue contribution grew from 15% in FY21 to ~25%+ in FY24, highlighting strong growth potential.
- Strong parentage and experienced management – Nelco is TATA group company and management team including Mr. A.S. Lakshminarayanan and Mr. P.J. Nath having great experience in communication and teleservice industry.
- Collaboration with Telesat to launch LEO satellite services - Nelco is collaborating with Telesat to introduce LEO satellite services in India, post regulatory approvals. Telesat's Lightspeed network uses LEO satellites to offer advanced, low-latency, fiber-like broadband connectivity for remote areas, enterprise, maritime, and aviation sectors. In FY23, Nelco successfully conducted its first in-orbit demonstration of high-speed broadband in India using Telesat's Phase 1 LEO satellite at its Mahape teleport. This partnership aims to address growing demand for reliable, high-speed internet across underserved regions and emerging applications like 4G/5G backhaul, telemedicine, and inflight connectivity, unlocking significant growth opportunities in the Satcom industry.

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- Collaboration with Intelsat and Panasonic Avionics for IFC service - In FY23, Nelco partnered with Intelsat to offer inflight connectivity (IFC) services in Indian airspace using Intelsat's advanced high-throughput satellites, ensuring seamless internet across Asia, Europe, Africa, and the Middle East. Additionally, Nelco collaborated with Panasonic Avionics to provide uninterrupted global connectivity for aircraft, enhancing its position in the growing IFC market.



- Investment in augmenting infrastructure - Nelco continues to invest in advanced technologies, satellite network capabilities, and ground infrastructure to enhance reliable and high-quality Satcom services. It has deployed capacities on Indian and foreign High Throughput Satellites (HTS) and wide-beam FSS satellites, expanding market opportunities. A new teleport in Dehradun became operational in October 2023, complementing its Mahape facility, boosting scalability to meet growing demand. Satellite bandwidth capacity grew by 60% in FY22, 40% in FY23, and 23% in FY24. Nelco plans annual capex of ₹90-100 crore over the medium term, funded through internal accruals and external debt.
- Expansion of service offerings - Nelco is expanding its service portfolio by exploring new Satcom technologies, services, and markets. It is also developing new verticals and plans to enter additional segments to address evolving customer needs.
- Better margins and able to generate profits when compared to competitors.

Risks to Nelco

- Regulatory Risk - The Satcom sector is governed by DoT and the Department of Space, with licenses based on national Satcom policy. Unfavorable regulatory changes could impact operations.
- Supply Chain Risk - Semiconductor shortages due to COVID-19 disruptions and the Russia-Ukraine conflict temporarily affected operations.
- Technology Dependence - Reliance on a few specialized global providers like VT iDirect and Gilat for VSAT hardware, and ISRO Antrix for satellite transponder space, poses risks due to proprietary technologies.
- Competition Risk - Increasing competition in India's Satcom market from existing and emerging players, including foreign providers, could pressure market share.
- Threat from Alternate Technologies - Expansion of terrestrial telecom infrastructure (fiber optics, towers) and future 5G services in remote areas may reduce the addressable market for Satcom services.

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Competition

Currently, in India there are 5 VSAT license holders – Nelco Ltd., Hughes Communications India Pvt Ltd., BSNL, Planetcast Media Services Ltd., HCL Comnet Systems & Services Ltd.

1. Hughes Communications India Pvt Ltd with Bharti Airtel –

Hughes Communications India Pvt Ltd (HCIPL), a majority-owned subsidiary of Hughes Network Systems, LLC (USA), has been a leader in India's Satcom industry since 1992, serving sectors like banking, defense, oil & gas, telecom, education, and retail. As the first company to acquire a VSAT license (1995) and IFMC license, Hughes held ~67% of India's VSAT market in 2020 through **partnerships with Bharti Airtel**. Bharti Airtel invested ₹100 crore in HCIPL for a 33.33% stake in January 2022.

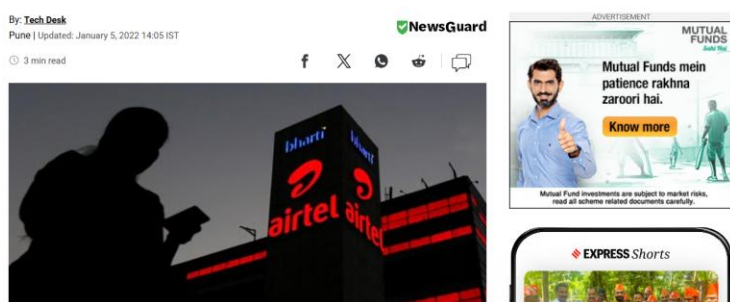
Hughes collaborates with Bharti Airtel and OneWeb* (a Bharti-backed LEO satellite company) to deliver revolutionary LEO satellite services in India, after taking approvals from IN-SPACe and DoT for using Oneweb LEO services instead of Antrix services. Further, Hughes' HTS broadband service, powered by ISRO's GSAT-11 and GSAT-29 satellites, offers high-speed, multi-Mbps connectivity to remote areas beyond terrestrial networks. Additionally, Hughes operates in satellite broadband, managed network services, SDWAN, and more.

Under its partnership with Bharti Airtel, HCIPL serves as the exclusive distributor for OneWeb's LEO satellite broadband services in India using Bharti Airtel's great market presence. Together, they form the largest satellite service operator in the country, with over combined base of 200,000 VSATs.

* Oneweb a world leading UK based satellite company. Oneweb operates a constellation of 648 active LEO satellites designed to provide high-speed, low-latency broadband globally, including remote and underserved areas. The satellites, built in partnership with Airbus. Bharti Enterprises is the largest shareholder in OneWeb

Bharti Airtel, Hughes form joint venture to offer satellite broadband service in India

Hughes will hold a 67 per cent stake in the JV while Airtel will hold a 33 per cent stake.



2. BSNL –

BSNL holds a Commercial VSAT CUG license, effective from February 29, 2020.

BSNL VSAT Broadband services on a single platform is a boon to the Corporate bodies, Banks, Hospitals, Stock exchanges, Educational institutions, Government, military etc., for quick network deployment including inaccessible/remote areas.

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3. Planetcast Media Services Limited –

Founded in 1996 and headquartered in Noida, Uttar Pradesh, the company is a leader in satellite-based solutions for media broadcasting, serving clients like Discovery, IPL, FIFA, Olympics, Disney+, Star, and Viacom. It also offers other Satcom services, including SAT services, disaster recovery, and mobile Satcom networks. But, Company is major player in broadcasting Satcom services and not VSAT services.

4. HCL Comnet Systems & Services Ltd - a subsidiary of HCL Technologies. Provides VSAT services, disaster recovery solutions, mobile satcom solutions.

Launching of Jio Space Fiber – Entry of Jio in the game

On February 14, 2022, **Jio Platforms Limited (JPL)** and **SES*** formed a joint venture, Jio Space Technology Limited (JPL 51% : SES 49%), to provide scalable and affordable broadband services in India using satellite technology. Leveraging SES-12 MEO and SES o3b mPOWER GEO satellites, the JV aims to connect remote towns, villages, enterprises, and government establishments under the "JioSpaceFiber" brand. With IN-SPaCe approval secured and DoT clearance underway, the JV is developing extensive gateway infrastructure in India to commence commercial operations.

* SES Luxembourg based leading global satellite-based content connectivity solutions provider that operates a fleet of GEO and MEO satellites.



Starlink to soon enter India – accepted the Indian government conditions

Elon Musk Starlink has formally accepted the key conditions set by the Indian government to obtain a license for launching satellite broadband services in the country. The company has agreed to comply with crucial security and data storage regulations, a mandatory requirement for licensing under the Department of Telecommunications (DoT). Conditions are including local storage of user data and lawful interception access for intelligence agencies.

Further, Starlink has also requested certain relaxations on some conditions, which it aims to fulfill progressively once its application is approved. The application is currently under review by the Ministry of Home Affairs and security agencies.

According to JM Financial, satellite internet services by Starlink and other satcom firms are significantly more expensive than traditional broadband services in India.

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Starlink's pricing: \$10-\$500 per month (₹800 – ₹41,000)

Indian broadband plans: Start from \$5-\$7 per month (₹400 – ₹600)

One-time Starlink hardware cost: \$250-\$380 (₹20,000 – ₹31,000)



Amazon's Kuiper – Facing delays in India

While Starlink has actively pursued licensing, Amazon's Kuiper has been slow in its application process. The delay is primarily because Kuiper has yet to launch its satellite constellation, making it a less immediate competitor in the Indian market.

Despite of delay, it is believed that Starlink and Kuiper could disrupt the Indian telecom market in the long run, particularly in rural and remote areas where traditional broadband infrastructure is limited.

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PARTH L AGRAWAL

Registered Address: UG 64, VIP Plaza, VIP Road, Vesu, Surat - 395007

Registration No.: INH000013712

Contact No.: +91 878050-07966

Email: connect@bastionresearch.in

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