Telesat LEO

Creating Loyalty through Connections
Just a few years ago, in-flight Wi-Fi was considered a “nice to have”. Today, passengers not only expect Wi-Fi, but their customer satisfaction and loyalty is directly influenced by their ability to connect.

A new network optimized for airline connectivity: Telesat LEO

Telesat LEO incorporates next-generation technology including:

**Data Processing in Space**
Full digital modulation, demodulation, and data routing occurs in space for processing, resulting in higher capacity and flexibility

**Phased Array Antennas**
Sophisticated antennas on each satellite with hopping beams can dynamically focus capacity precisely where users require it

**Optical Inter-satellite Links**
Data can travel at the speed of light from one satellite to another, resulting in a fully interconnected global mesh network that allows customers to access the Telesat LEO network no matter where they are

**Hybrid orbits**
Satellites in an industry-first combination of polar and inclined orbits, resulting in complete global coverage, including polar areas, with higher capacity where most of the world’s population lives

Telesat has developed a highly innovative global network composed of 300 state-of-the-art Low Earth Orbit (LEO) satellites seamlessly integrated with on-ground data networks.
Telesat LEO provides a superior passenger experience.

High Throughput
Gigabits per second link speeds and a network with multiple Tbps of capacity ensures every passenger can access bandwidth to stream video, browse the Internet, or perform any other online activity unconstrained.

Global Coverage
Every point on earth is covered so your passengers no longer lose connectivity when travelling through northern latitudes.

Low Latency
Our network is about 20X more responsive than today’s satellites and on par with fiber networks. You now can provide an “at home” or “at work” Internet experience in the sky, which means passengers can use a VPN, access encrypted intranet pages, or participate in online gaming while in flight.

High Capacity for Hotspots
Our intelligent network understands your flight routes and can dynamically allocate additional bandwidth to areas with high traffic or to busy hubs so your passenger experience never trails off.

Always On
Highly resilient network with multiple interconnected satellites and ground nodes without any single point of failure ensures your passengers always stay connected.
Telesat has conducted several testing campaigns with leading maritime, aero and enterprise service providers, demonstrating industry-leading high throughput and quality.

Telesat LEO, launching in 2022, will be available through leading connectivity service providers.