City-quality connectivity everywhere
Telesat has developed a highly innovative global network composed of 188 state-of-the-art Low Earth Orbit (LEO) satellites seamlessly integrated with on-ground data networks.

Telesat Lightspeed 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 Lightspeed network no matter where they are.

**Hybrid orbits**
Satellites fly in a 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.

A ubiquitous transport alternative that delivers wireline quality and wireless flexibility – at disruptive economics.
Backhaul connectivity re-imagined

Unlock Revenue Pools
Increase revenue by selling more services and lower churn rates with enhanced network performance. Bring in new connectivity to unserved areas or expand coverage of 4G/5G networks.

High Performance with Low Latency
20-times more responsive than today’s satellites for better voice, video streaming and security that matches fibre connectivity.

Always On
Highly resilient network with multiple interconnected satellites and ground nodes without any single point of failure ensures your customers always stay connected.

Quick Service Deployment
MEF 3.0 standards compliance provides seamless plug-and-play integration with the ability to rapidly set up connectivity anywhere, anytime.

Global, Scalable
Every point on Earth is covered, with Gigabits per second speeds to a remote and multiple Tbps of capacity in the network to deliver enterprise-grade connectivity.
Telesat has conducted several testing campaigns with leading mobile network operators, including the world’s first 5G testing over LEO.

Telesat Lightspeed services will be available through leading connectivity service providers. To learn more, visit www.telesat.com/lightspeed