TELESAT LIGHTSPEED NETWORK
- 188 satellites in a combination of polar and inclined orbits, optimized for complete global coverage and capacity
  - Polar Orbit
    - 78 satellites: 6 planes, 13 satellites per plane
    - 1,015 km altitude
  - Inclined Orbit
    - 110 satellites: 10 planes, 11 satellites per plane
    - 1,325 km altitude

SATELLITE MANUFACTURER
- Thales Alenia Space

SPECTRUM
- Telesat Lightspeed has global priority Ka-band spectrum rights

NETWORK CAPACITY
- The combined capacity of the 188 satellite network is 10 Tbps

MAXIMUM DATA RATES
- Up to 7.5 Gbps can be offered to a single terminal
- Up to 15 Gbps can be offered to a single “hotspot” site, such as remote communities, airport hubs and sea ports

DESIGN LIFE
- 10 year operational life
- 12 years in orbit, including orbit raising, orbit storage and end of life de-orbit

TELESAT LIGHTSPEED LEADING-EDGE TECHNOLOGIES:
- Sophisticated phased array antennas on each satellite are combined with beam hopping technology to activate ~ 130,000 beams that can dynamically focus multiple Gbps of capacity into demand hot spots like large airports or major sea ports
- Nearly 800 high capacity optical links interconnect the satellites with multiple, highly resilient transport paths, creating a first-ever, lightening-fast data superhighway in space
- Data processing in space, including full digital modulation and demodulation on the satellite, coupled with a revolutionary end-to-end network operating system, gives customers unprecedented flexibility and options for routing traffic across the globe and eliminates gateway hops for the fastest, secure end-to-end delivery of data

SATELLITE SIZE
- 800 kilos each
- Prime power of ~4 kW

SATELLITE FUEL AND ORBIT RAISING
- Krypton gas and electric thrusters

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