

Telesat Lightspeed

Global, meaningful connectivity for all

TELESAT[™]

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Spectrum Management Task Force May 2024



Telesat Lightspeed timeline

Tests & Demos

Commercial Service

1st April 2024 - Telesat and Government of Canada Agree to Final Terms on C\$2.14 Billion Loan in Support of Telesat Lightspeed

Service testing with multiple pathfinder satellites
2023-2025

Launches begin
Field Trials
Q2 2026

Global service begins
• PoPs & Landing Stations
• User terminals
• Market access
H2 2027

Technology demo on LEO 3 satellite

Network Emulator for service testing

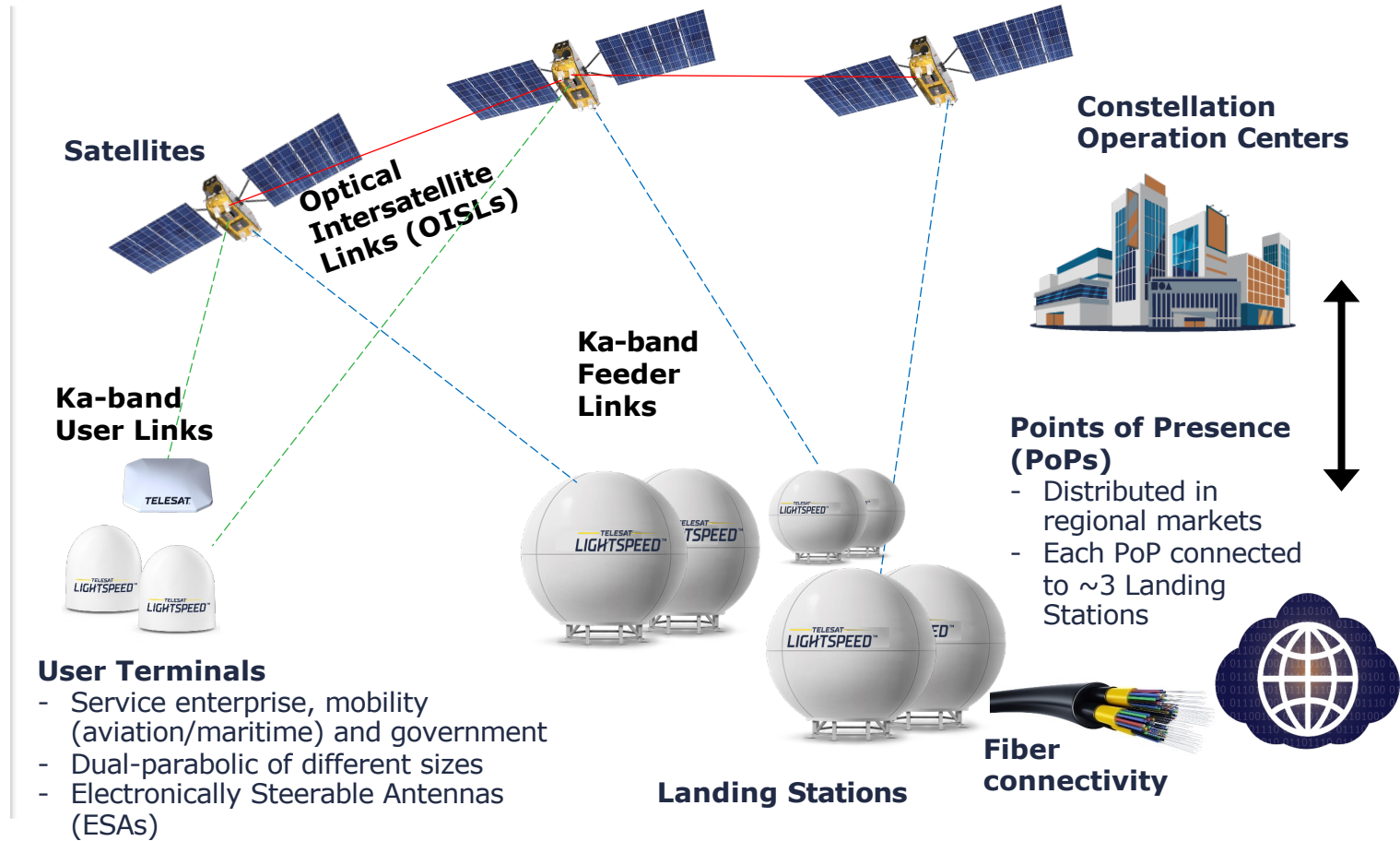


TELESAT
LIGHTSPEED™

Fully funded, next-generation, enterprise-class LEO network delivering resilient, high-capacity connectivity everywhere – land, sea, and air

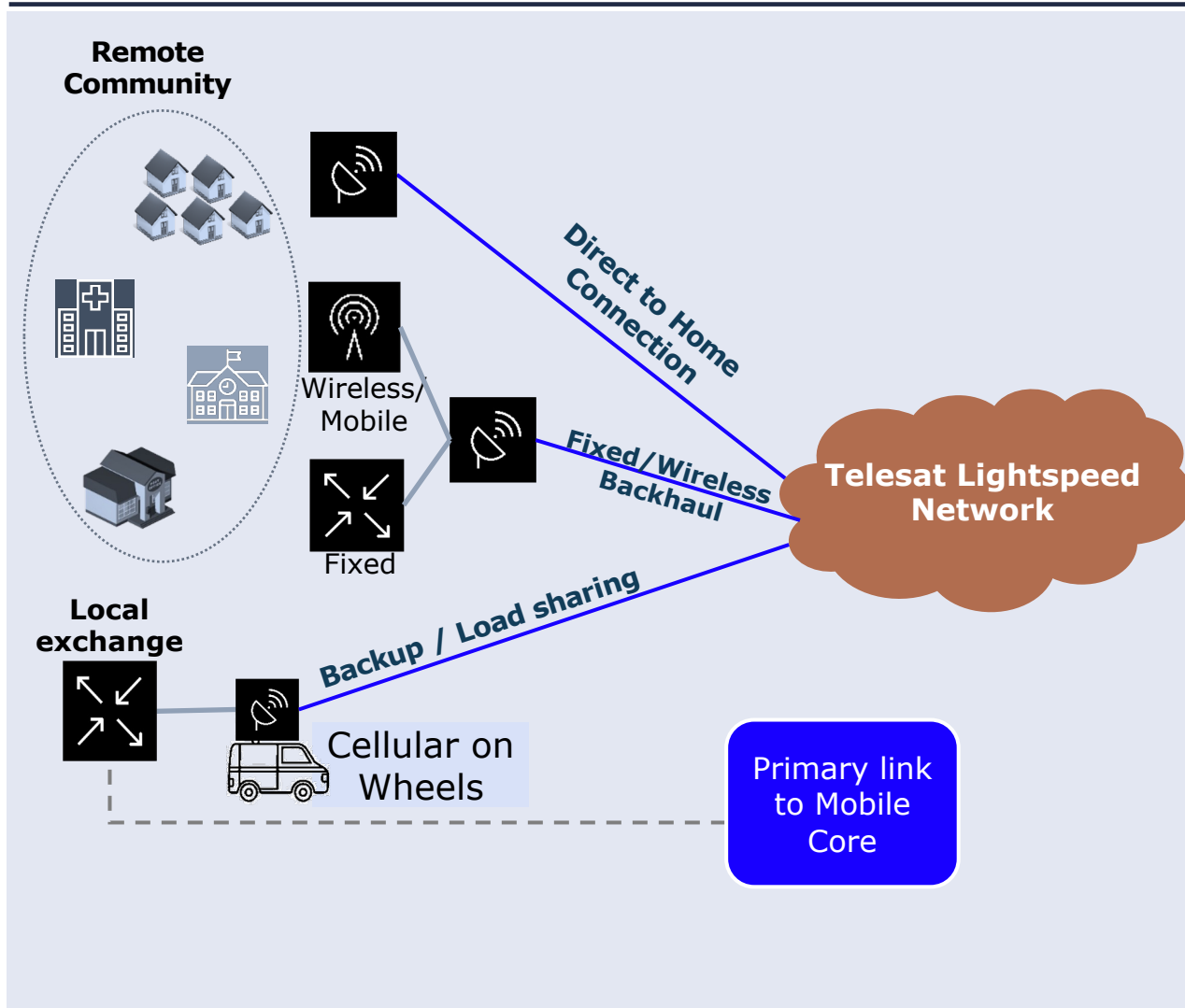
Telesat Lightspeed service leverages state-of-the-art technologies

- ▲ Ka-band Gateway and user links
 - 17.8 – 18.6 GHz / 18.8 – 20.2 GHz (space-to-Earth)
 - 27.5 – 29.1 GHz / 29.5 – 30.0 GHz (Earth-to-space)
- ▲ Software-defined satellite with on-board data processing for dynamic routing/processing in space
 - Flexible network that will adapt in near real-time to user demand
- ▲ Optical Inter-Satellite links create a global resilient mesh network in space, coupled with ground network of global Landing stations and PoPs
- ▲ Multiple highly optimized orbits for maximum capacity distribution globally
- ▲ Gigabit speeds in both downlink and uplink



Advanced constellation with high capacity per satellite enables affordable, enterprise-class connectivity

Complementing terrestrial services



- ▲ Telesat Lightspeed **complements terrestrial services as part of a larger mobile ecosystem, including 5G**, in different communities
- ▲ **Key enabler for universal, meaningful connectivity** alongside terrestrial services by allowing
 - Rapid rollout of broadband across developing countries
 - Multi-Gbps of capacity in rural/remote communities
 - Competitive backhauling solutions for rural/remote area with significant advantages for terrestrial operators
 - Lowers risk on investment
 - Eliminates large infrastructure deployments
 - Allows for revenue generation in new, hard-to-reach markets

Essential Regulatory Considerations

NGSO systems have truly global coverage. The following are of paramount importance:

▲ **Harmonized spectrum**

- ▲ Spectrum availability – Ka-band is key for Telesat
- ▲ Designation of relevant frequencies - for use by NGSO satellite systems on a domestic basis consistent with ITU Radio Regulations
- ▲ Reasonable spectrum fees - large bandwidths are used by novel NGSO satellite systems

▲ **Transparent and streamlined regulatory framework**

- ▲ Focus of regulation should be domestic uplink provider
- ▲ Timely publication and updates of domestic/regional authorization governing uplink to satellite constellation
- ▲ Blanket authorizations for uplink/transmitting user terminals with similar characteristics
- ▲ Permission for terminals installed on foreign vessels/aircraft to operate while in temporary transit on a non-interference basis

Thank you!

TELESATTM

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