OneWeb

AEC
ARCTIC ECONOMIC COUNCIL

OneWeb presentation

Oulu Finland – June 2017

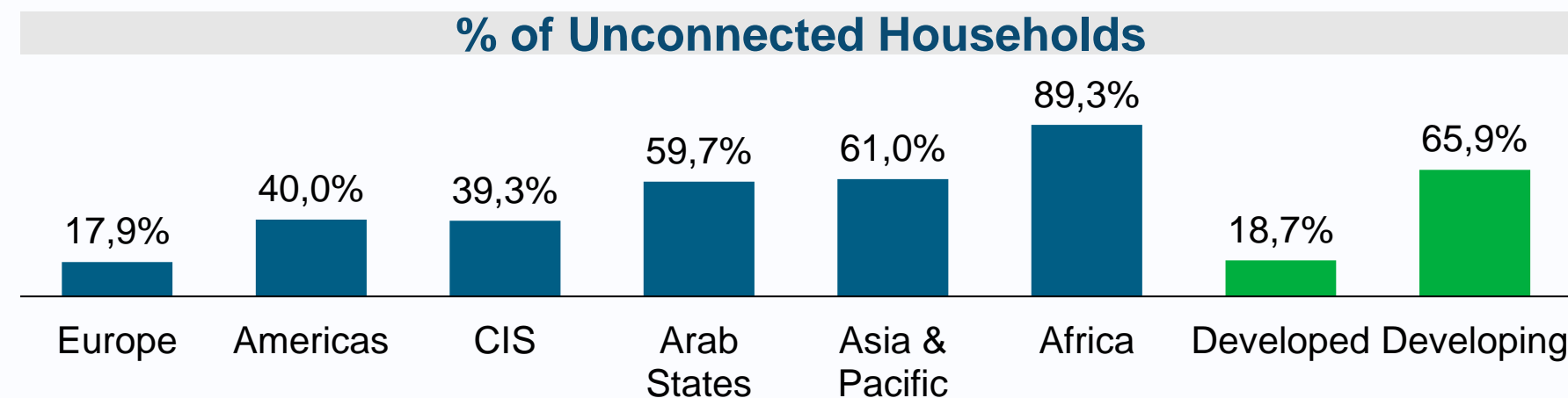# The Dream of Affordable Internet Access for Everyone is Getting Closer

www.oneweb.world

tony@oneweb.net

Tony Azzarelli – VP Regulatory Affairs

Majority of the World Does Not Have Access to the Internet

- The ITU[1] estimates that **over 4 billion people** have none or bad internet access globally

- OneWeb's market entry objectives align with public initiatives and international governments' goals to increase access globally

54% of the world has no internet access

% of Unconnected Households

Europe	Americas	CIS	Arab States	Asia & Pacific	Africa	Developed	Developing
17,9%	40,0%	39,3%	59,7%	61,0%	89,3%	18,7%	65,9%

Source: ITU - ICT Facts & Figures, 2015; FCC 2015 Broadband Progress Report.
(1) International Telecommunication Union, an agency for information and communication technologies within the United Nations (UN).

OneWeb

3

OneWeb is ...

A Global Communications Company

Global Coverage	100% of the Globe
Fastest Speed	Up to 500 Mbps
Lowest Latency	< 50 milliseconds
Mobile Technology	3G / LTE / 5 G / WiFi
System Capacity	more than 7 Tbps

Enabled by Satellite Technology

Premium Spectrum	≥ 3 GHz of globally harmonized spectrum
System Architecture	Up to 882 Satellites
Smallest Terminals	30cm - 70cm
Lowest Satellite Cost	<1M$ / satellite

OneWeb enables people to use their own devices

OneWeb
Communications
Architecture

Access link
- WiFi, 3G, LTE

OneWeb
Core
Internet

MNOs
ISPs
Telcos
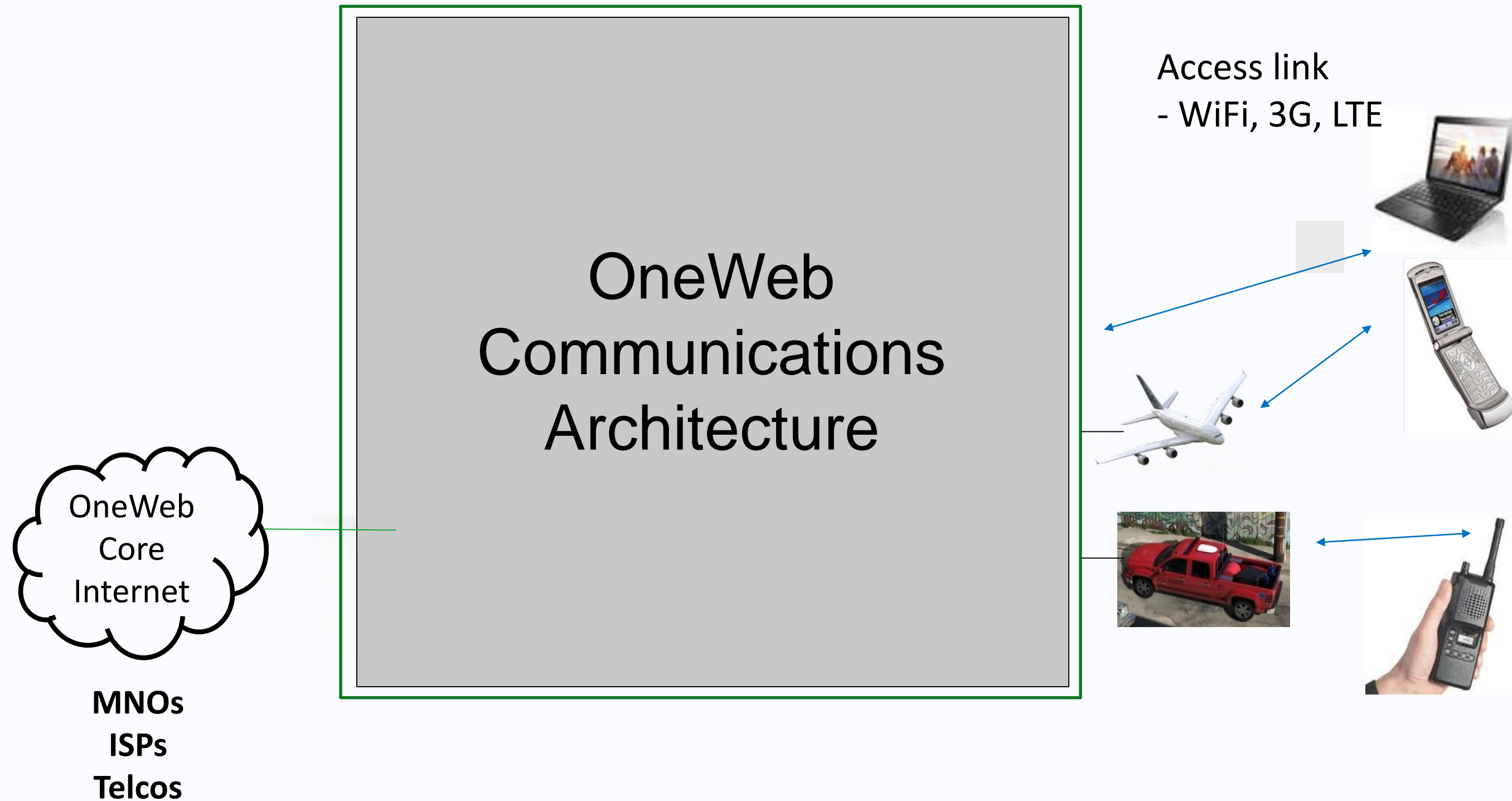
OneWeb

Through the OneWeb communications system

Feeder link — Ka-band

Service link — Ku-band

Access link
- WiFi, 3G, LTE

OneWeb
Core
Internet

MNOs
ISPs
Telcos

Gateway
site

Satellite
User Terminal
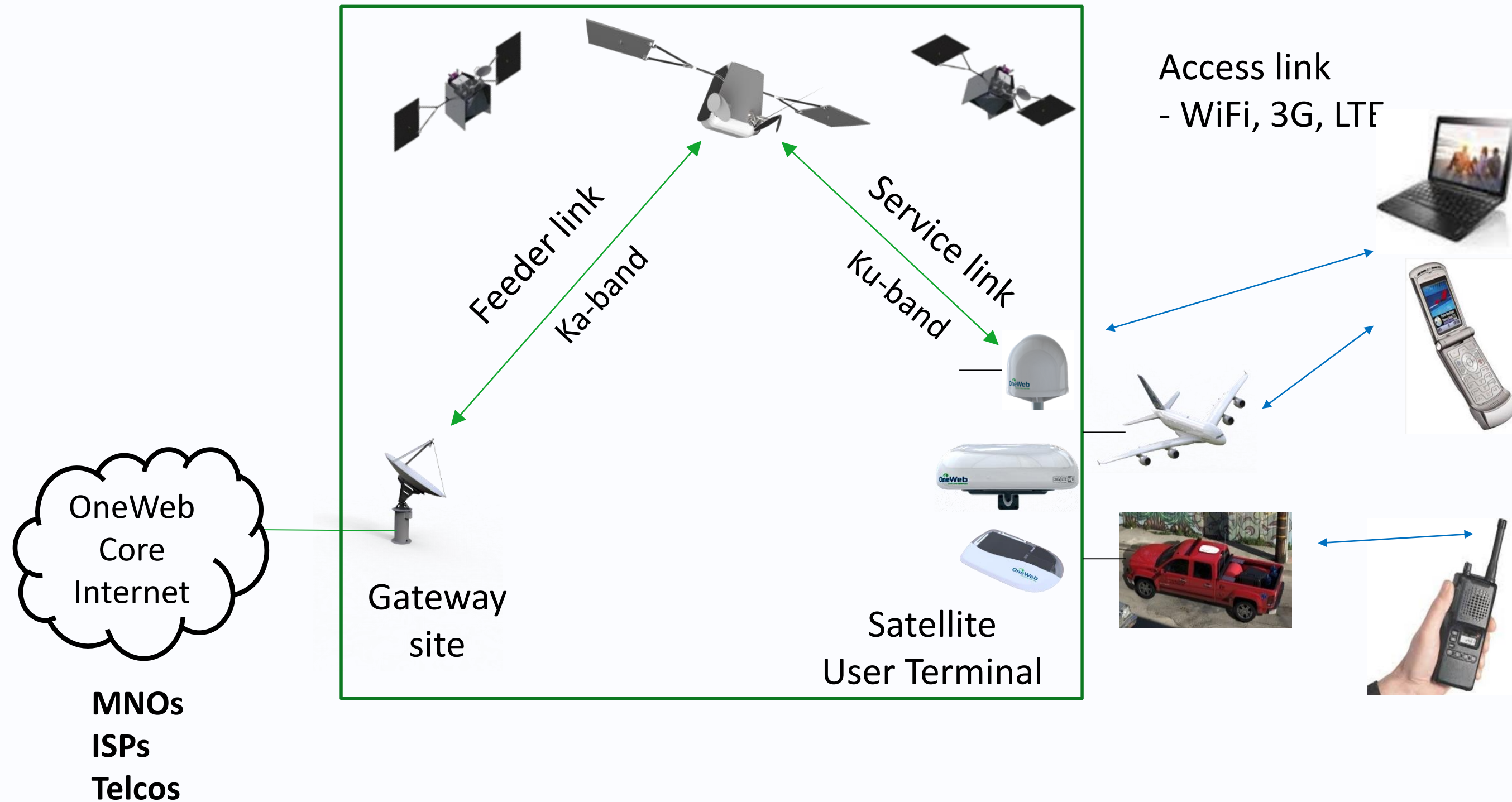
Well Established Partnership Ecosystem

- Key strategic and commercial partners

- Strong support rapid development of the satellite, user terminal and ground systems

- Key distribution partnerships support initial go-to-market strategy

- OneWeb will continue to partner with new industry leaders to support deployment and market access of OneWeb's service
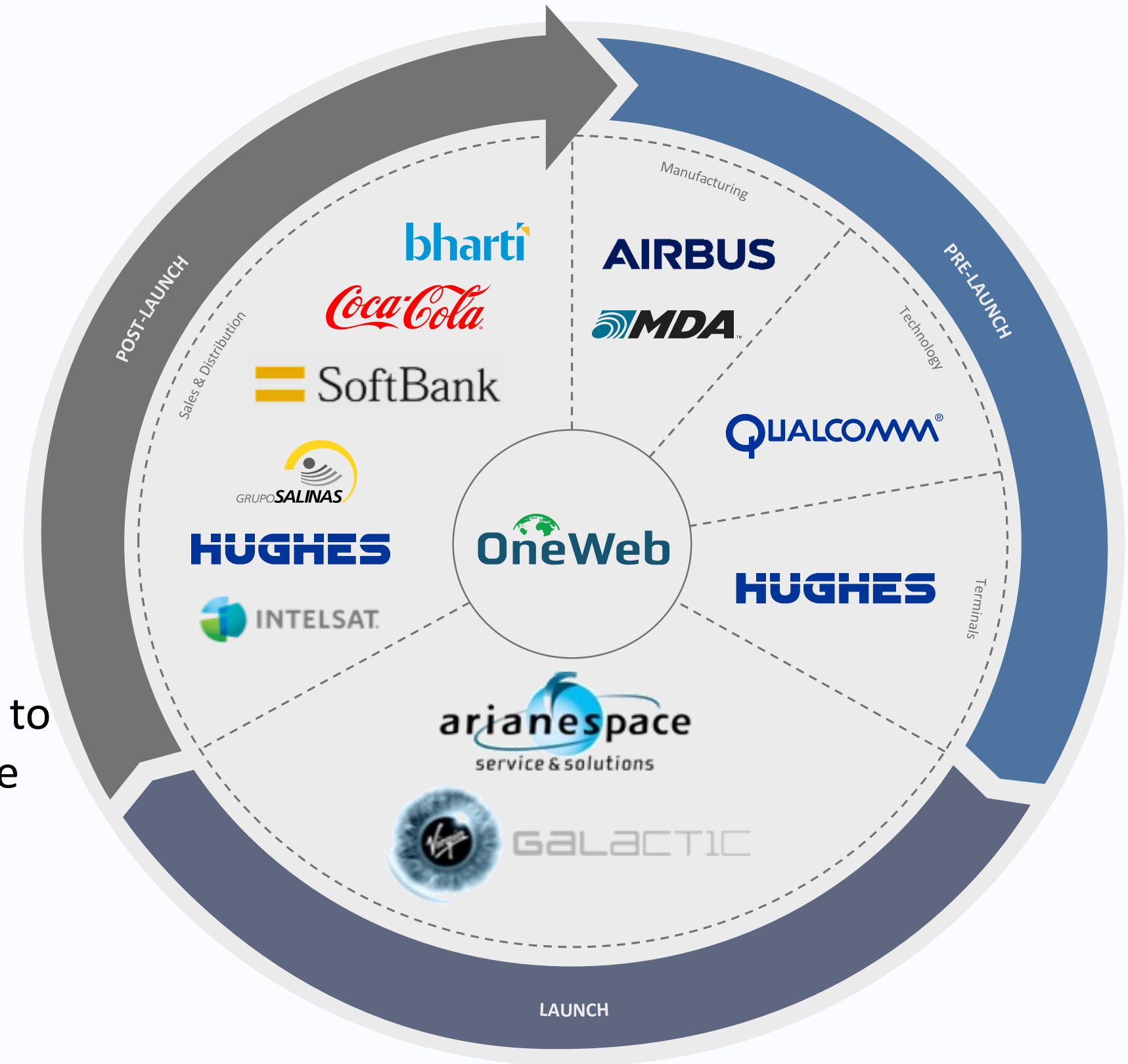
Enabling affordable connectivity

Economic Growth and Benefits for isolated communities
and communications on the move

- e-Government
- e-Medicine
- e-Learning
- e-Commerce

- Border control
- Emergency Services
- Science
- Weather stations

- e-Office
- Tele-conferencing
- Cloud computing
- e-Games

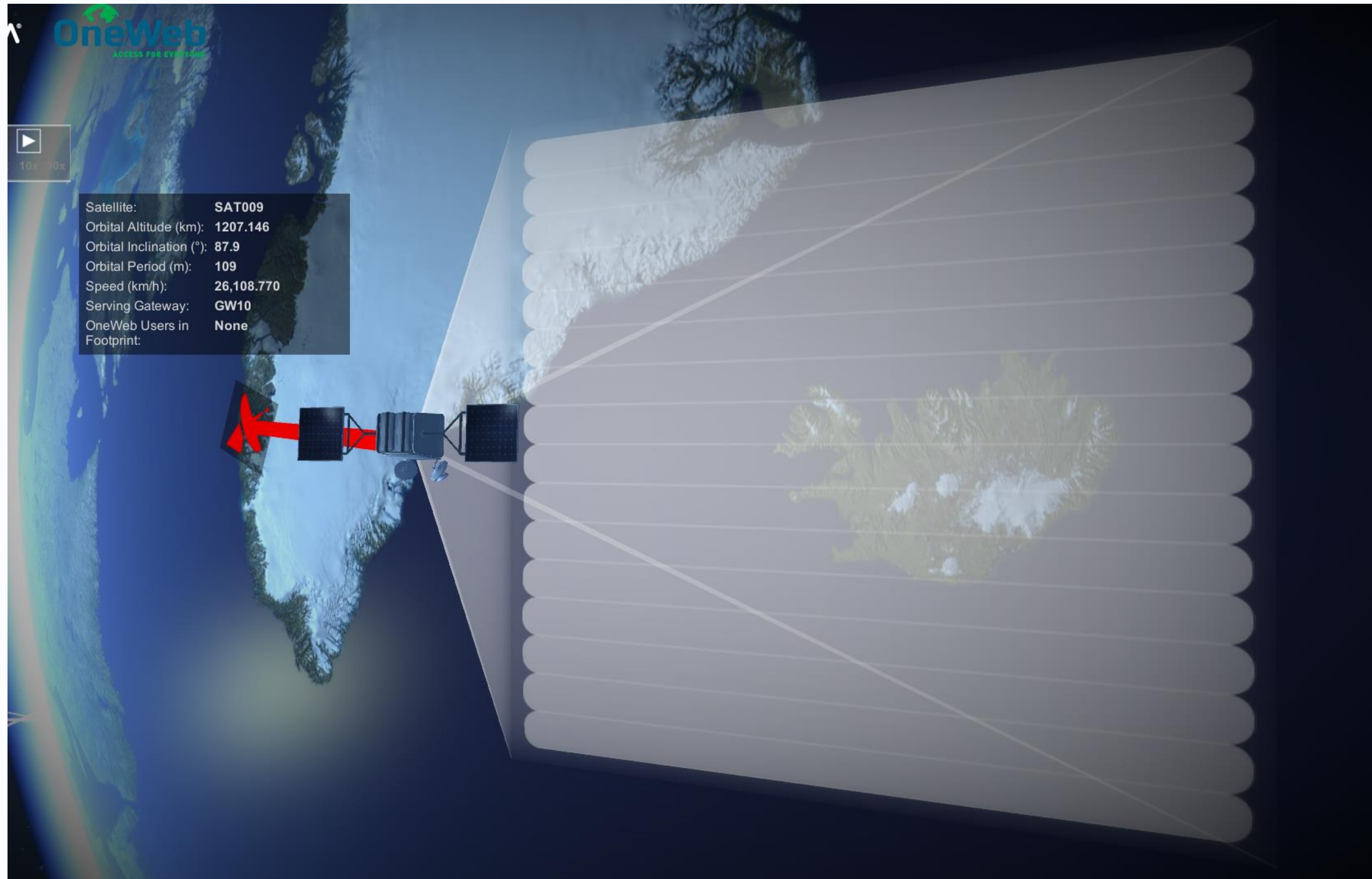# Empowering Communities Without Access
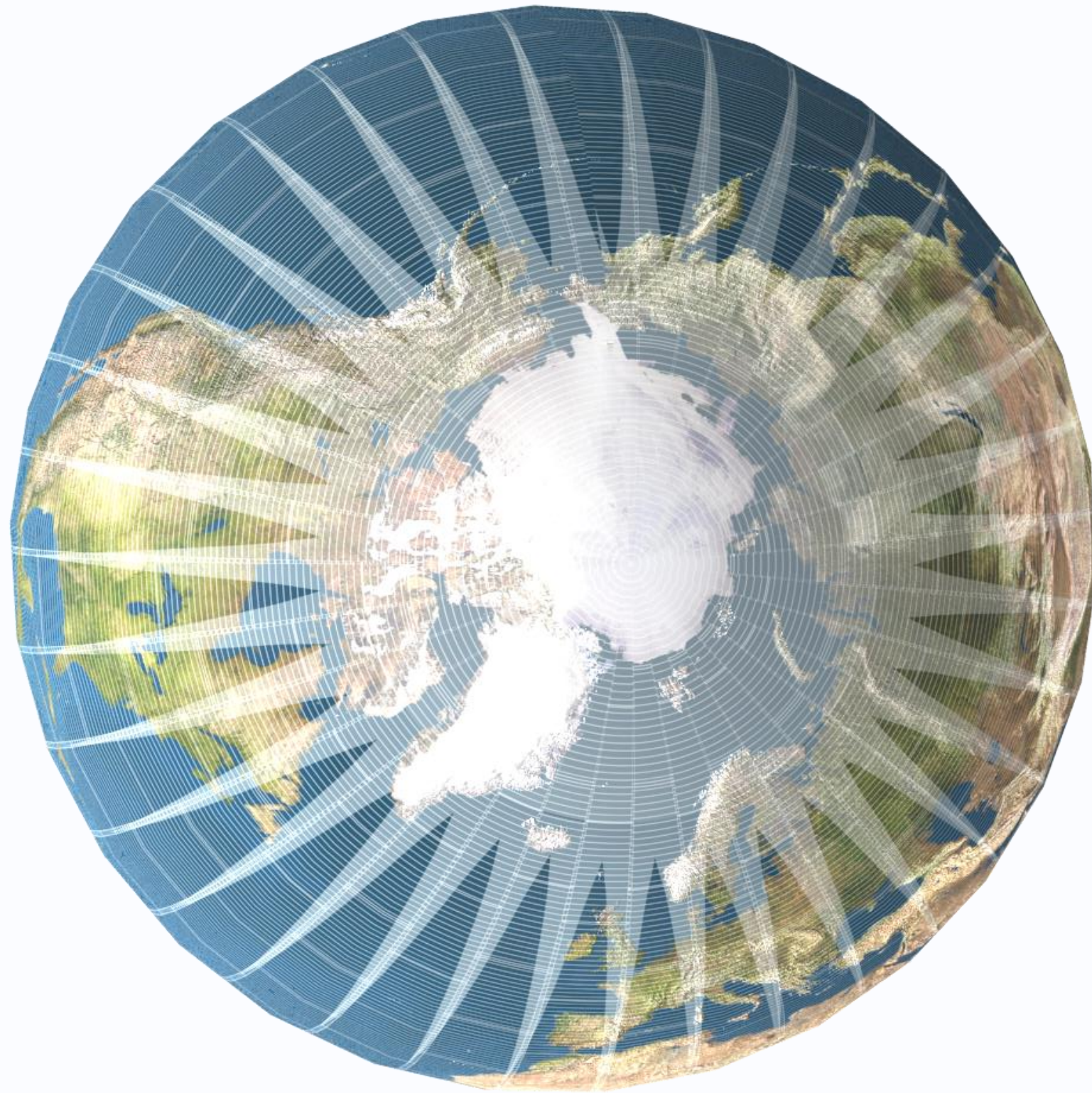
System Overview

- Global Communications Company

- Ku-band and Ka-band spectrum

- 900 satellite production

- 1200 km altitude

- First launch – Early 2018

- Ramping introduction of services by end of 2019

- Fully compatible with existing connectivity solutions (Wi-Fi, 3G, 4G/LTE, 5G)
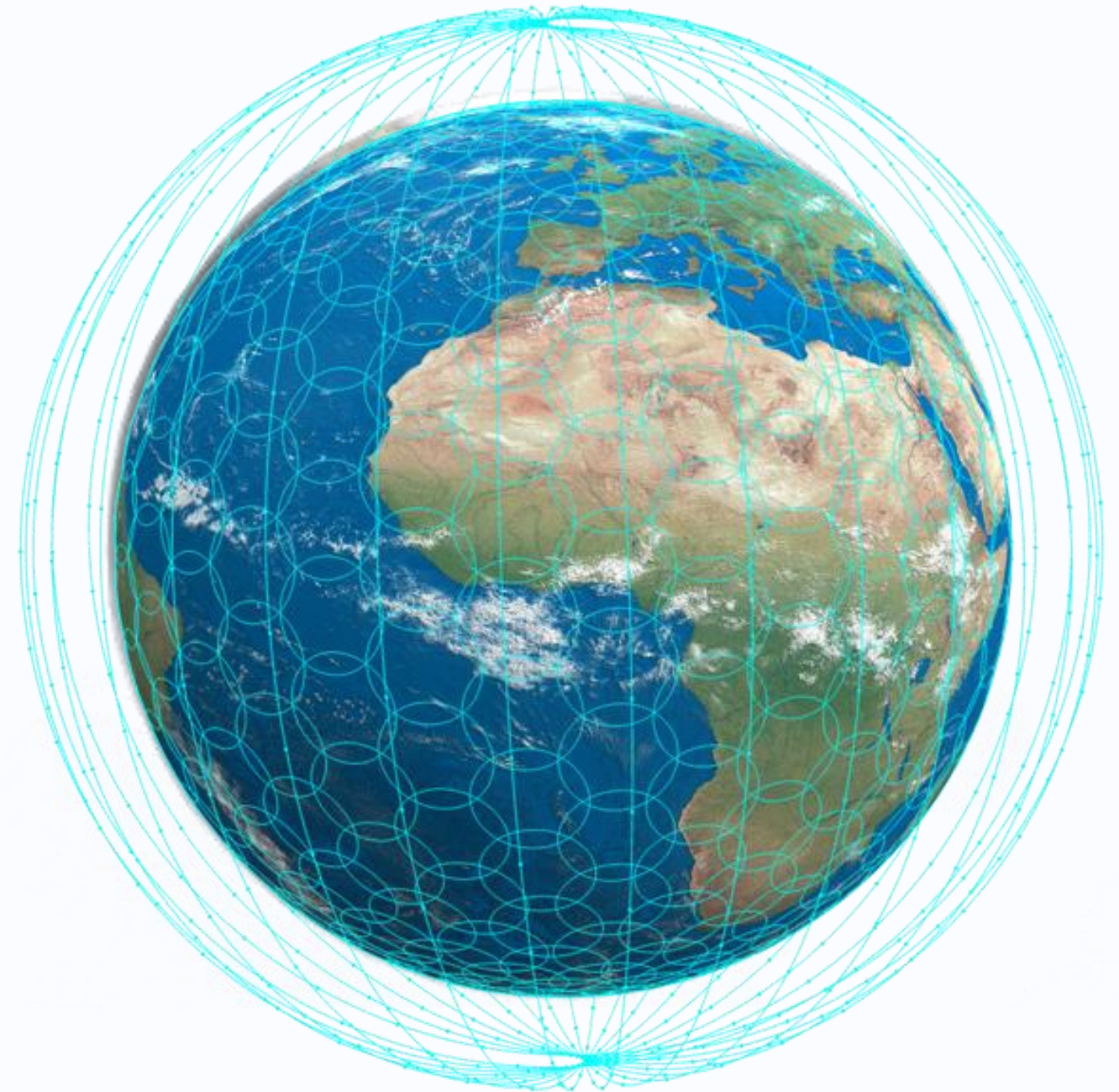
Satellite coverage of one satellite

# Satellite coverage of the Artic Region
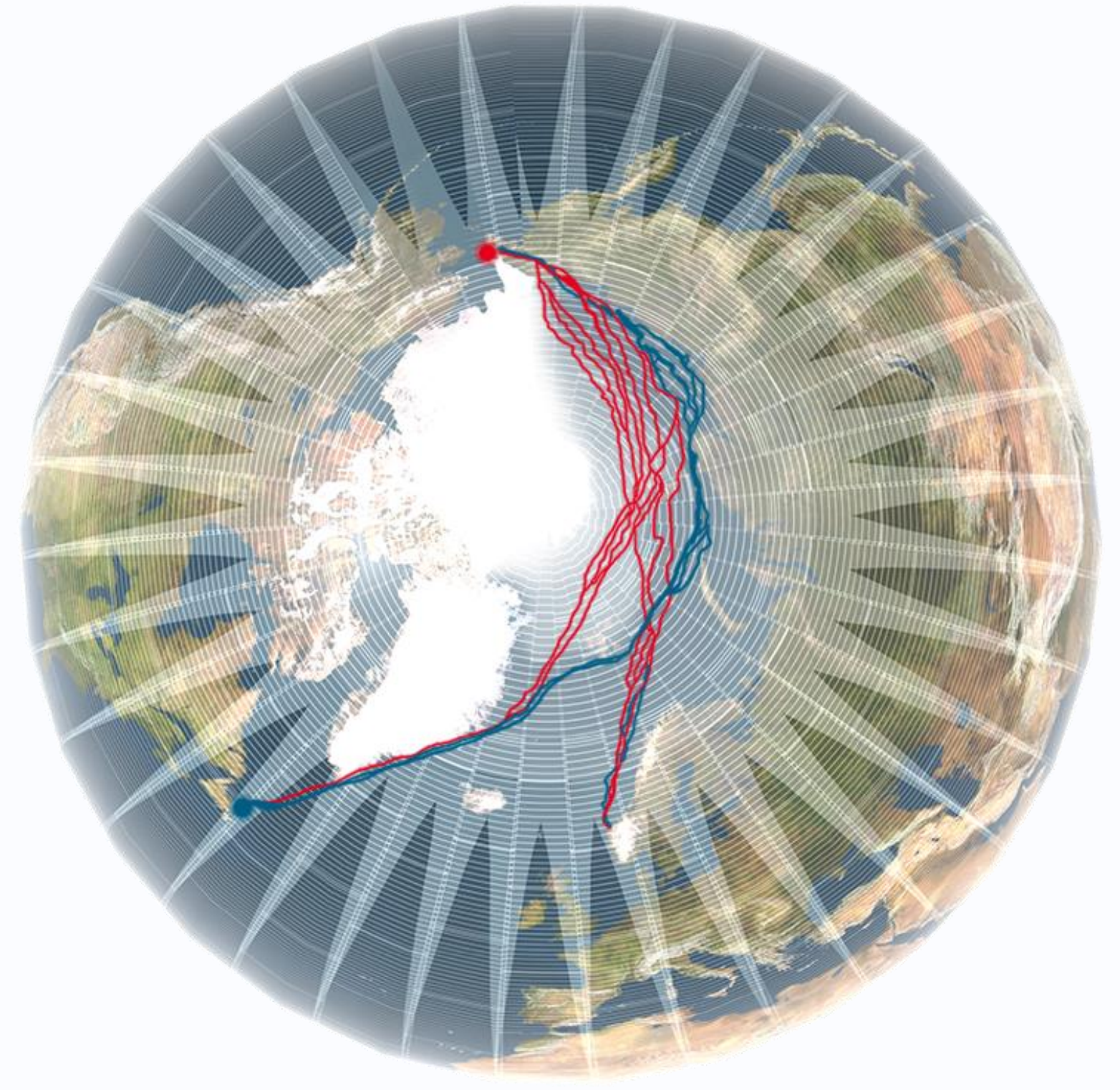
OneWeb Benefits

- Global coverage (including Poles)

- Seamless mobility

- Low latency

- Small, high-performance user terminals

- Cellular extension, even without towers

- Improved performance in obstructed terrain (> 55⁰ elevation)

- Multiple local distribution options, working with local partners

Allowing Community Access Points
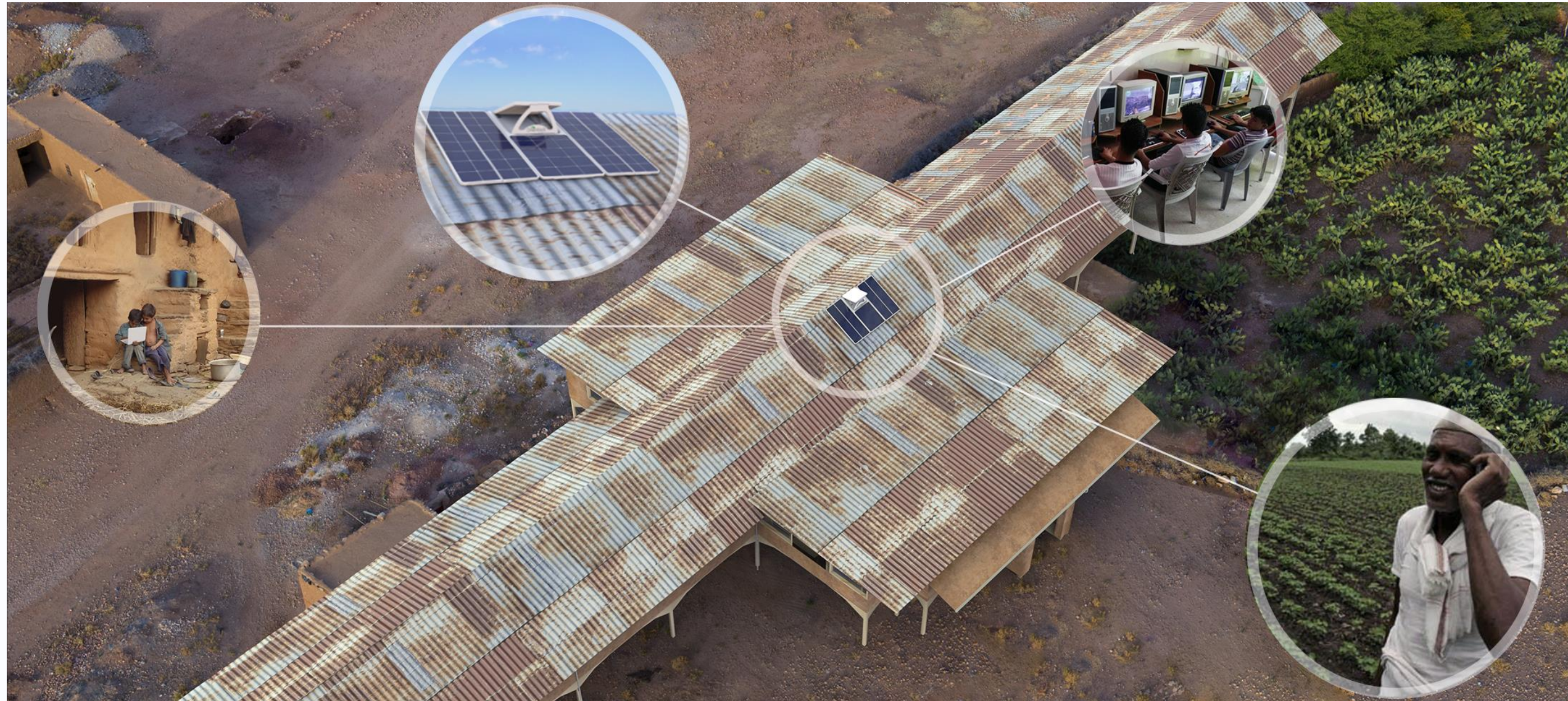
Connecting First Responder and Disaster Areas

Providing Cellular Backhaul in Remote Areas

Carrier Neutral

OneWeb Terminals

Base station

Cellular Backhaul in Roads

Connecting People and Machines in Transit

Connecting Workers in Remote Areas

OneWeb

Connecting people at air and sea

OneWeb Satellite Broadband in the Artic Region

Tony Azzarelli – VP Regulatory Affairs