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OVERVIEW

Project Kuiper is built around the Kuiper System -- a resilient, high-performance network spanning Earth and space to provide fast, affordable broadband connectivity on a global scale.

Performance

We deploy satellites at three altitudes and inclinations, allowing us to deliver our high-speed service to a majority of the world's population with the flexibility and capacity they demand.

Scale

The Kuiper System combines thousands of LEO satellites, hundreds of ground gateways, and global networking and infrastructure to reliably connect tens of millions of customer terminals.

Impact

Project Kuiper will serve individual households and businesses, as well as schools, hospitals, enterprises, governments, and other organizations operating in places without reliable connectivity.



OUR CUSTOMERS



Residential

High-speed, affordable service for individual households.

Small businesses

Bringing small businesses into the digital age.

Public services

Increasing access to information, education, and healthcare.

Enterprise and transportation

Flexible, secure connectivity for remote assets across land, sea, and air.

Emergency services

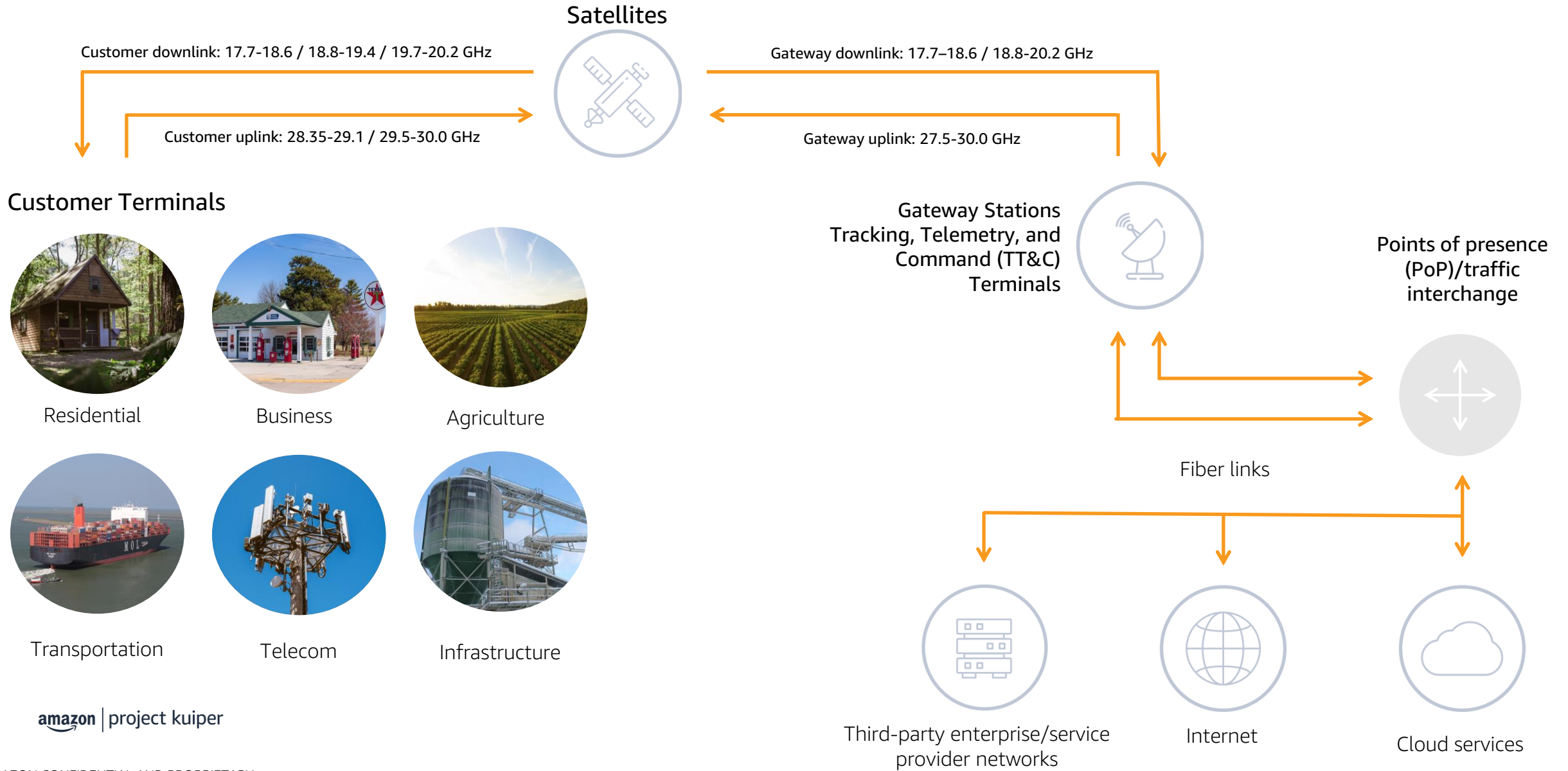
Reliable connectivity to support emergency and disaster relief efforts.

Telecommunications

Expanding wireless and mobile networks to new regions.

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SYSTEM ARCHITECTURE



KUIPER CUSTOMER TERMINALS

7" x 7" 18cm x 18 cm

- Ultra - small form factor.
- 100 Mbps downlink.
- Half duplex.

11" x 11" 28cm x 28cm

- Built for scale.
- 400 Mbps downlink.
- Half duplex.

30" x 20" 76cm x 51cm

- Enterprise focused.
- 1,000 Mbps downlink.
- Full duplex.



NETWORKING AND INFRASTRUCTURE

On Earth, Project Kuiper includes a distributed network of ground gateways and the terrestrial networking and infrastructure required to deliver service on a global scale. In space, we use optical links to securely transmit data between satellites, forming a mesh network on orbit.

GROUND GATEWAY

Our global network of ground gateways provides secure data uplink and downlink with our satellites, and routes traffic to internet points of presence (PoP) around the world.

NETWORK

Project Kuiper uses software-defined networking (SDN) to coordinate beams, allocate bandwidth, and dynamically route data traffic -- including through our optical mesh network in space. We encrypt data as it travels from the customer terminal to our network core.

