



# OneWeb

**ACCESS FOR EVERYONE**



# Enable Affordable Access for Everyone













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**OneWeb**  
ACCESS FOR EVERYONE















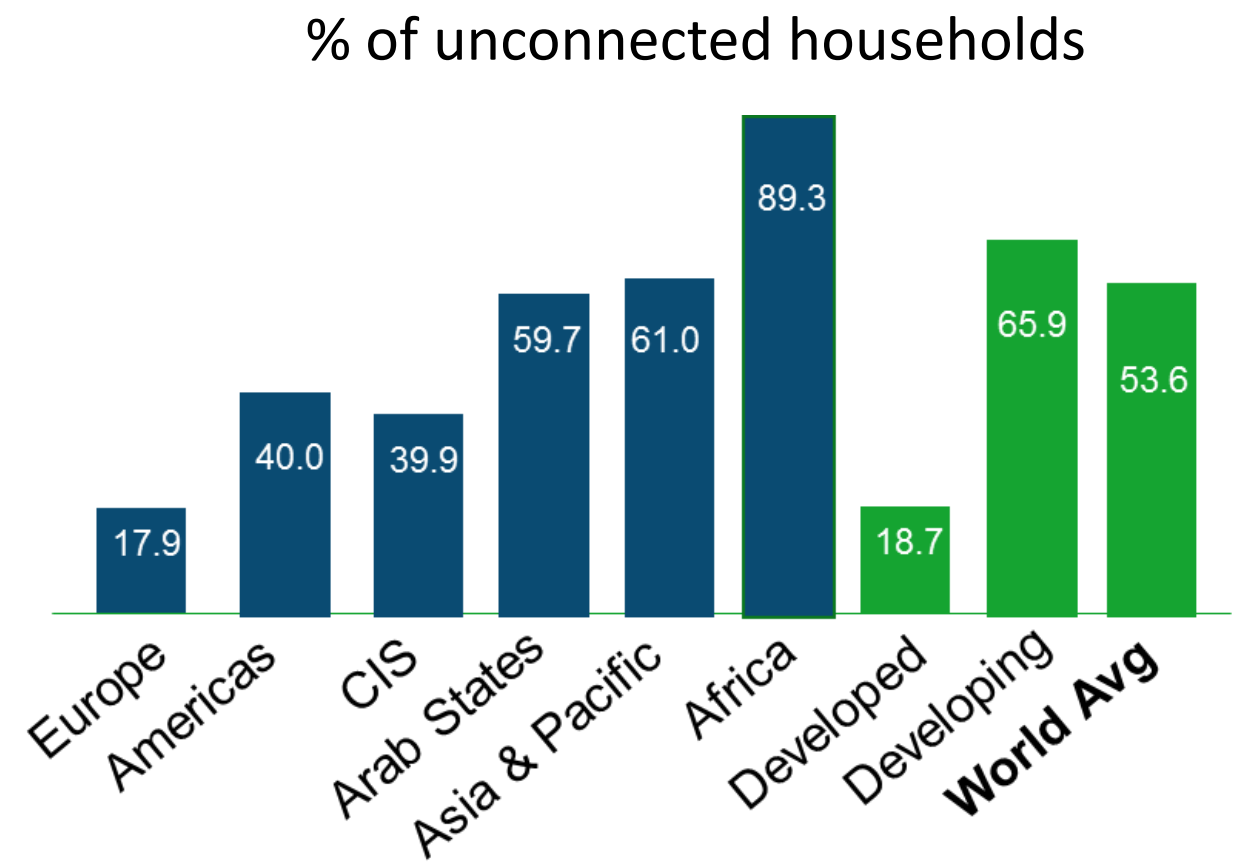








# The Unconnected And Underserved World



\*figures based on 2015 ITU estimates







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50Mbps



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# 50Mbps – Solar Powered





# 50Mbps – Solar Powered – Self Installed



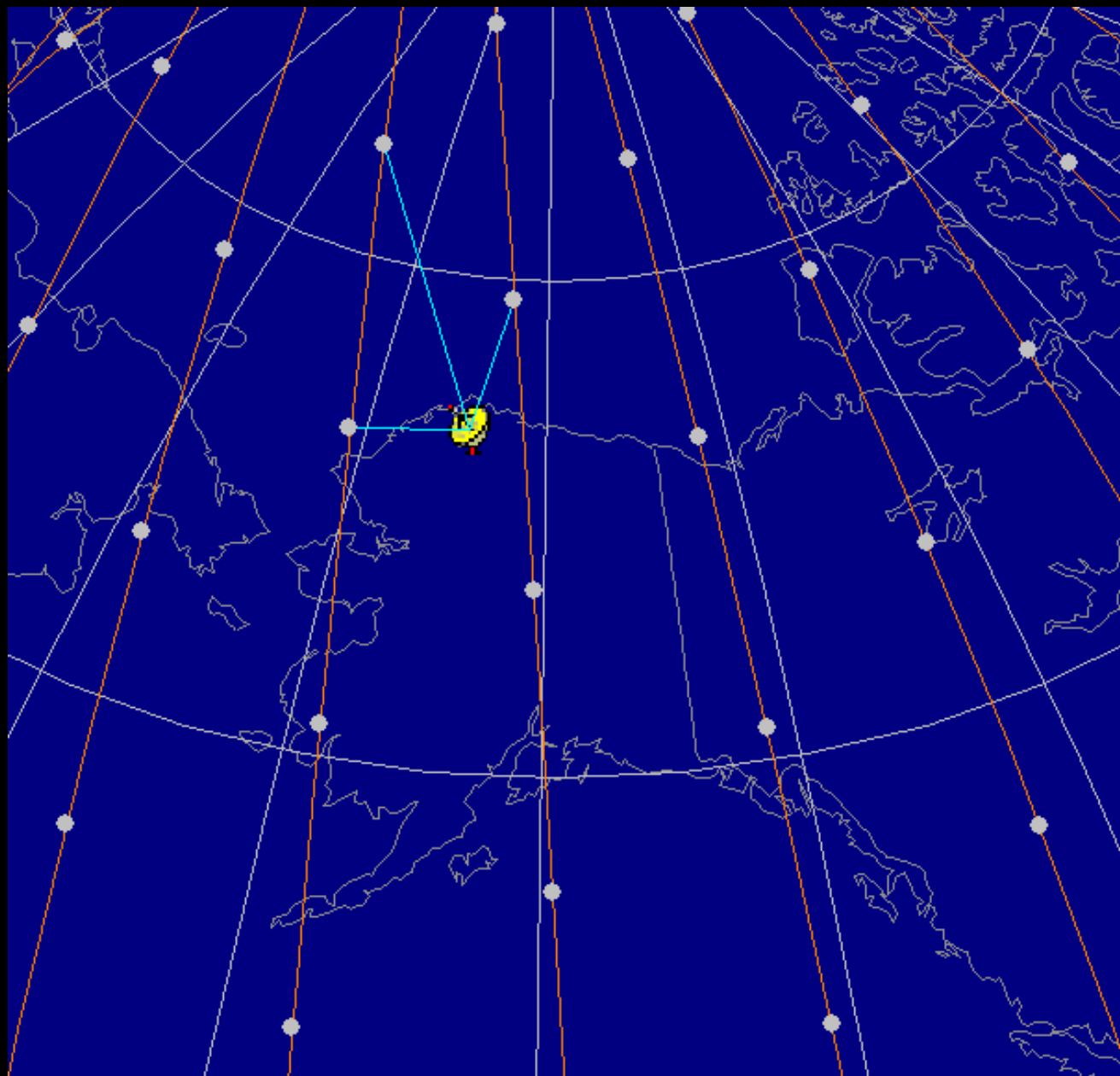


50Mbps – Solar Powered – Self Installed – WIFI + LTE



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Demo Controls

Playback Controls

Orbit Layers

OneWeb User Selection

Replay Intro Animation

Restore Layout

1x

10x

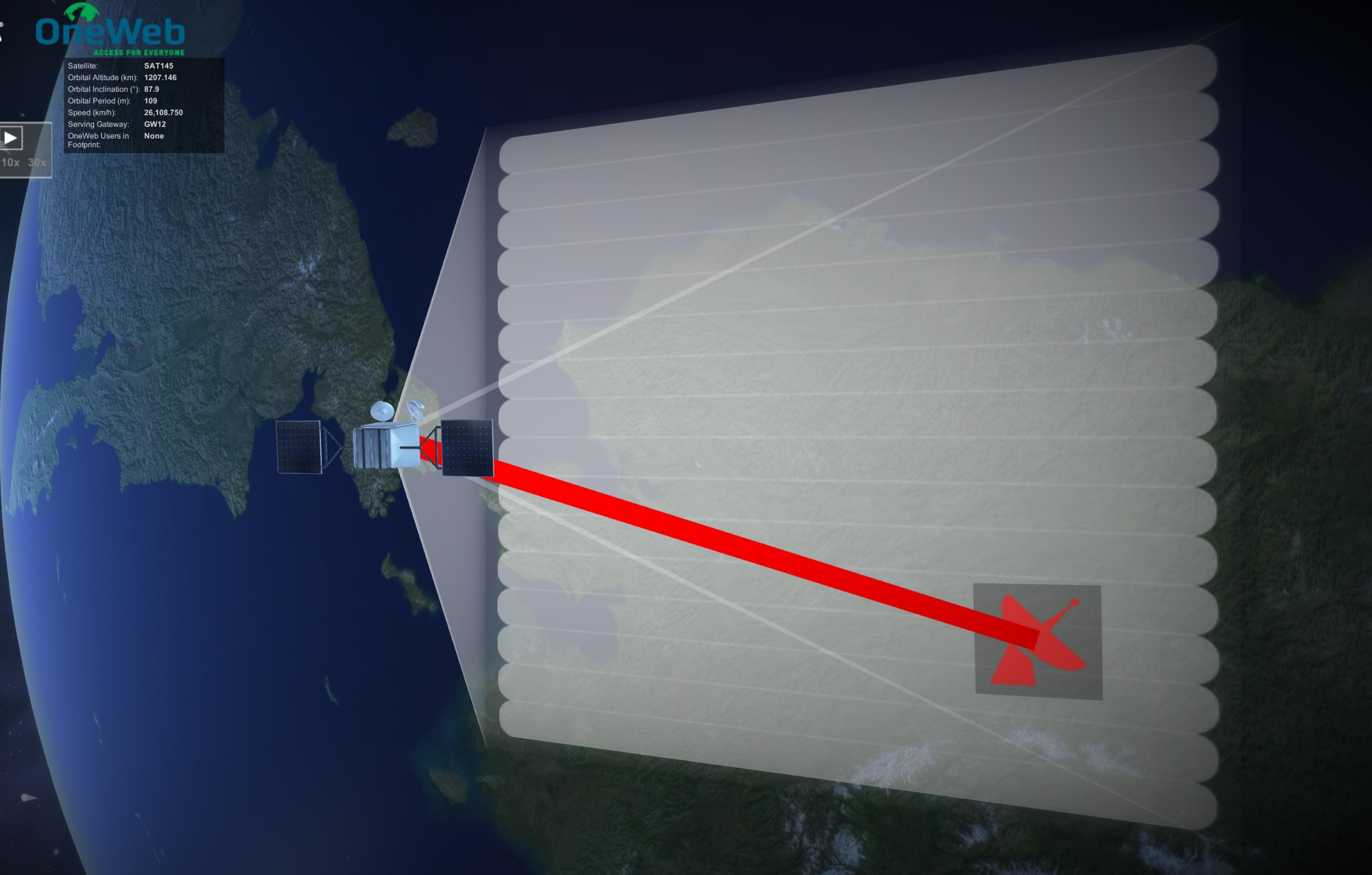
30x

Scenario Selection

- Home View
- Handover View
- Photo Transfer
- Latency View
- Web Browsing

OneWeb Emulator

Satellite:	SAT145
Orbital Altitude (km):	1207.146
Orbital Inclination (°):	87.9
Orbital Period (m):	109
Speed (km/h):	26,108.750
Serving Gateway:	GW12
OneWeb Users in Footprint:	None

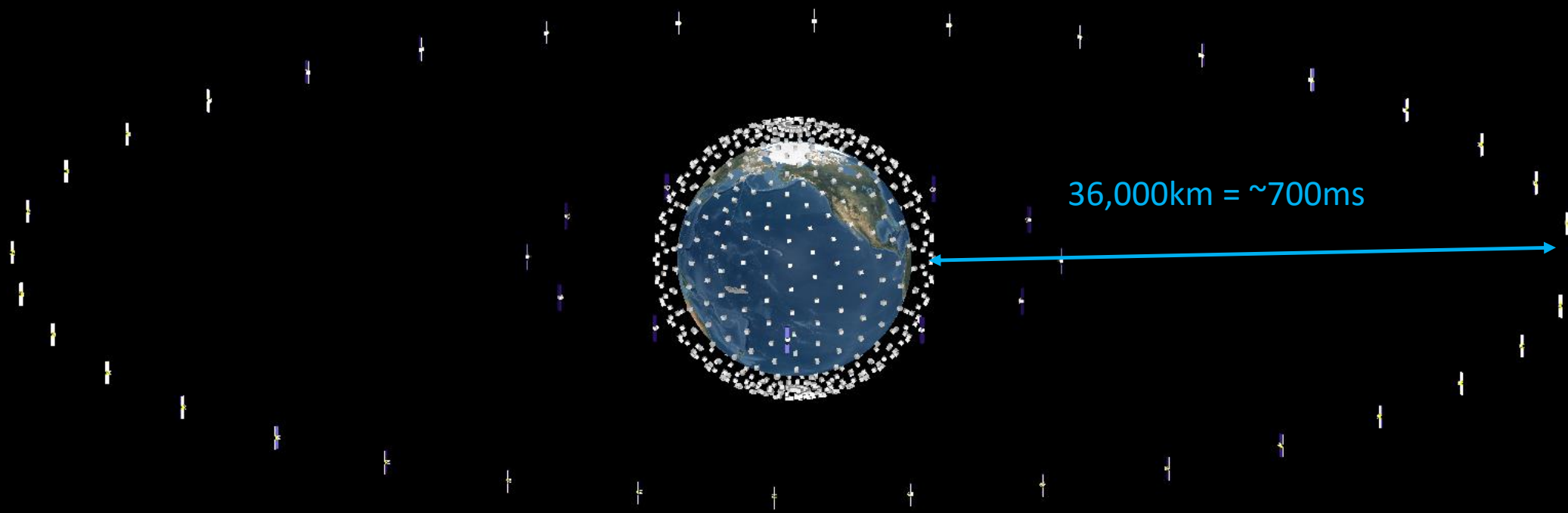




# Latency is key to quality

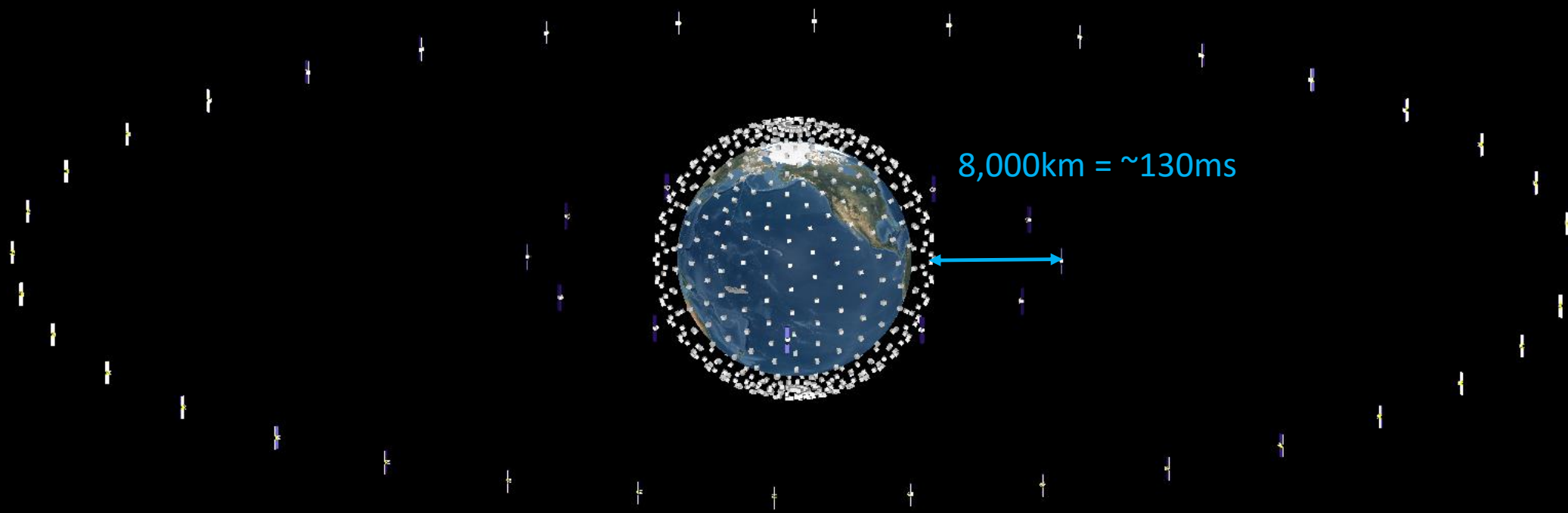
Latency increases with packet round trip distance



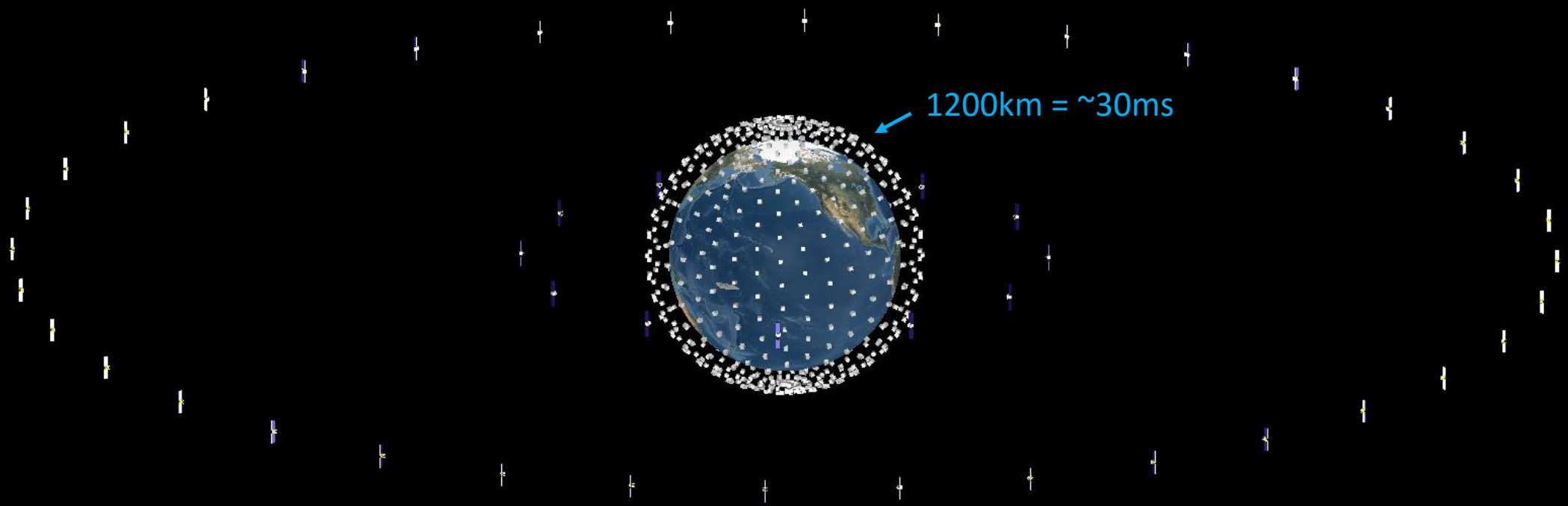


36,000km = ~700ms











# Broadband Facts

Fixed broadband consumer disclosure

## Choose Your Service Data Plan for 50Mbps Service Tier

Monthly charge for month-to-month plan	<b>\$60.00</b>
--	----------------

Monthly charge for 2 year contract plan	<b>\$55.00</b>
---	----------------

Click here for other [pricing options](#) including promotions and options bundled with other services, like cable television and wireless services.

## Other Charges and Terms

Data included with monthly charge	<b>300GB</b>
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Charges for additional data usage – each additional 50GB	<b>\$10.00</b>
--	----------------

Optional modem or gateway lease – Customers may use their own modem or gateway; click here for <a href="#">our policy</a>	<b>\$10.00/month</b>
---	----------------------

Other monthly fees	<b>Not Applicable</b>
--------------------	-----------------------

## One-time fees

Activation fee	<b>\$50.00</b>
----------------	----------------

Deposit	<b>\$50.00</b>
---------	----------------

Installation fee	<b>\$25.00</b>
------------------	----------------

Early termination fee	<b>\$240.00</b>
-----------------------	-----------------

## Government Taxes and Other Government-Related Fees May

**Apply:** Varies by location

[Other services on network](#)

## Performance - [Individual experience may vary](#)

Typical speed downstream	<b>53 Mbps</b>
--------------------------	----------------

Typical speed upstream	<b>6 Mbps</b>
------------------------	---------------

Typical latency	<b>35 milliseconds</b>
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Typical packet loss	<b>0.08%</b>
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## Network Management

Application-specific network management practices?	<b>Yes</b>
--	------------

Subscriber-triggered network management practices?	<b>Yes</b>
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More [details on network management](#)

<b>Privacy</b>	See our <a href="#">privacy policy</a>
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<b>Complaints or Inquiries</b>	To contact us: <a href="#">online</a> /(123)456-7890; To submit complaints to the FCC: <a href="#">online</a> /(888)225-5322
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Learn more about the [terms used on this form and other relevant information](#) at the FCC's website.

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# Broadband Facts

Fixed broadband consumer disclosure

## Choose Your Service Data Plan for 50Mbps Service Tier

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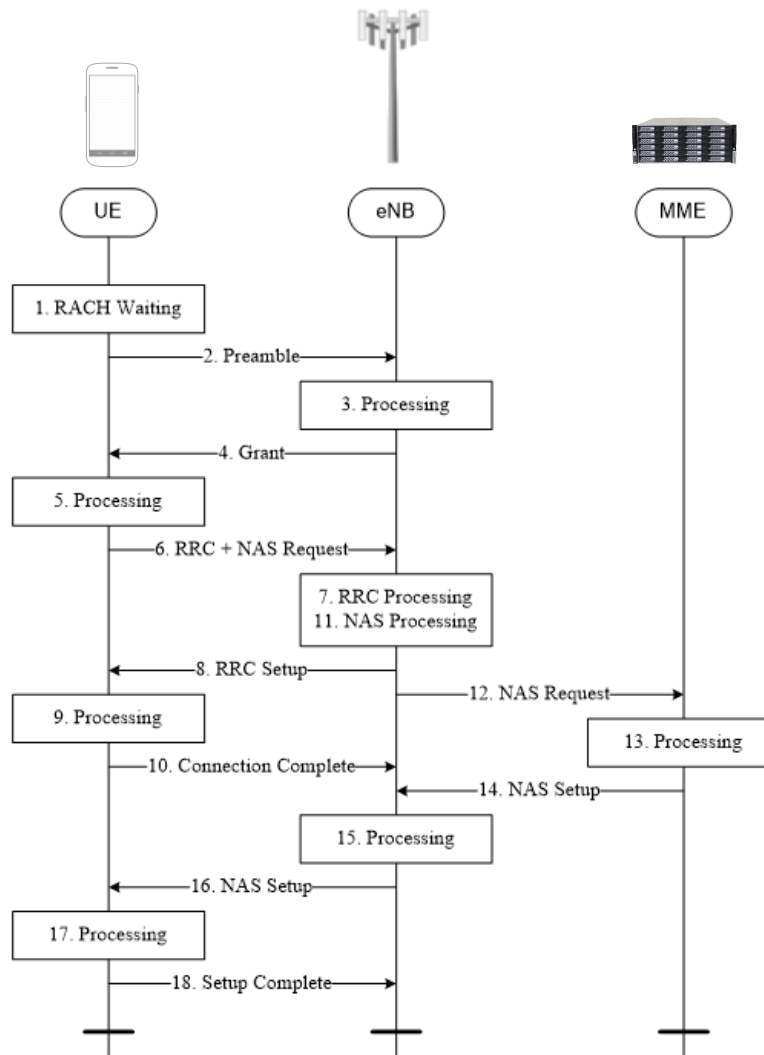
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Component	Description	Minimum [ms]	Average [ms]
1	Average delay due to RACH scheduling period	0.5	2.5
2	RACH Preamble	1	1
3-4	Preamble detection and transmission of RA response (Time between the end RACH transmission and UE's reception of scheduling grant and timing adjustment)	3	5
5	UE Processing Delay (decoding of scheduling grant, timing alignment and C-RNTI assignment + L1 encoding of RRC Connection Request)	5	5
6	Transmission of RRC Connection Request	1	1
7	Processing delay in eNB (L2 and RRC)	4	4
8	Transmission of RRC Connection Set-up (and UL grant)	1	1
9	Processing delay in the UE (L2 and RRC)	15	15
10	Transmission of RRC Connection Set-up complete (including NAS Service Request)	1	1
11	Processing delay in eNB (Uu -> S1-C)	4	4
12	S1-C Transfer delay	T_S1	T_S1
13	MME Processing Delay (including UE context retrieval of 10ms)	15	15
14	S1-C Transfer delay	T_S1	T_S1
15	Processing delay in eNB (S1-C -> Uu)	4	4
16	Transmission of RRC Security Mode Command and Connection Reconfiguration (+TTI alignment)	1.5	1.5
17	Processing delay in UE (L2 and RRC)	20	20
	<b>Total delay [ms]</b>	<b>76</b>	<b>80</b>



# Network Access

- 7.5m Rural 2G Cell Towers
- Cellular Backhaul
  - Equivalent latency to fiber/microwave
  - Simple installation
  - Per GB pricing





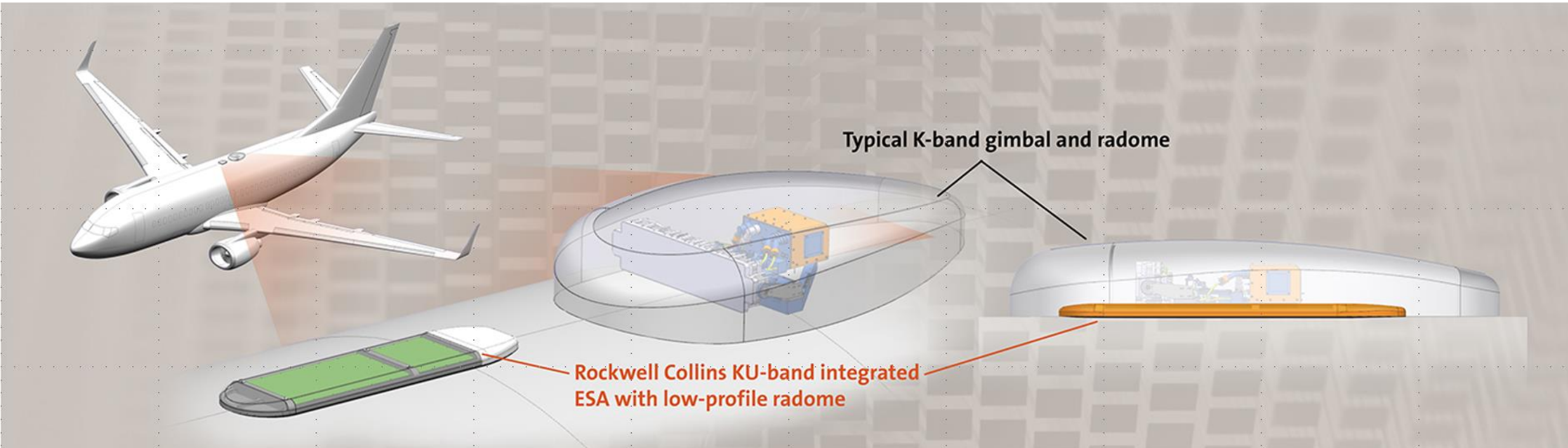
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ANYWHERE ANYTIME



# In Transit Connectivity



# Antenna Comparison



## OneWeb

- Active Array
- 25lbs
- Negligible drag
- Pole to Pole – Gate to Gate

## Typical

- Mechanical
- 150lbs
- >\$140,000 of fuel/year
- No Polar Coverage













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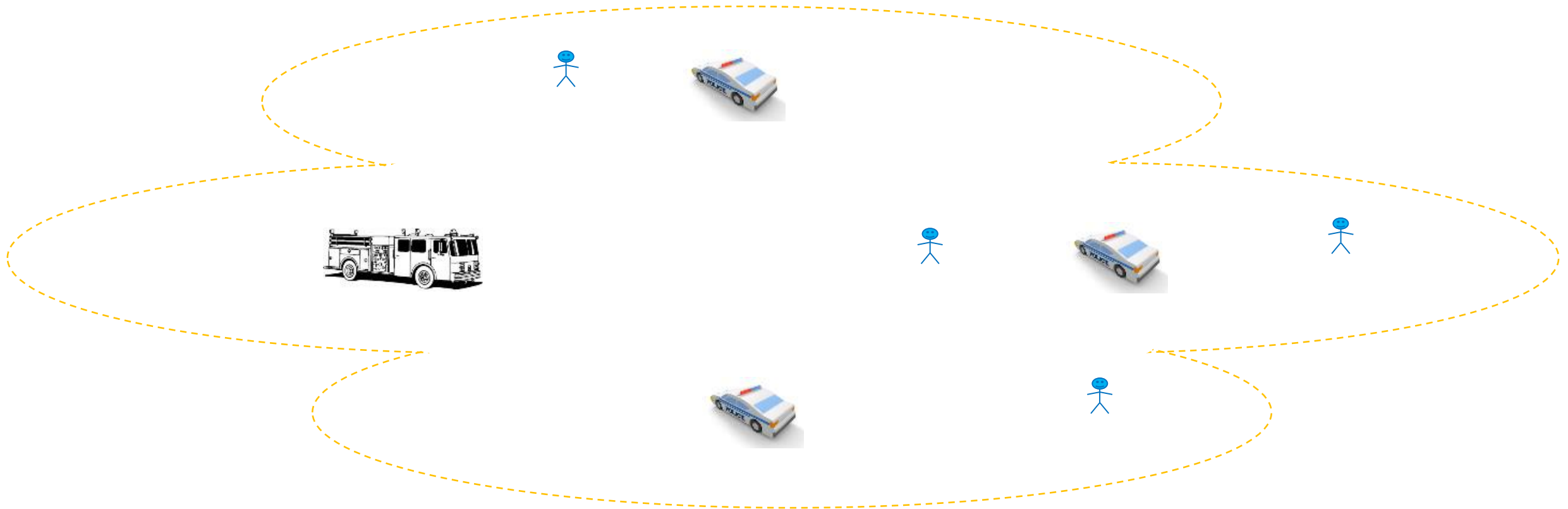
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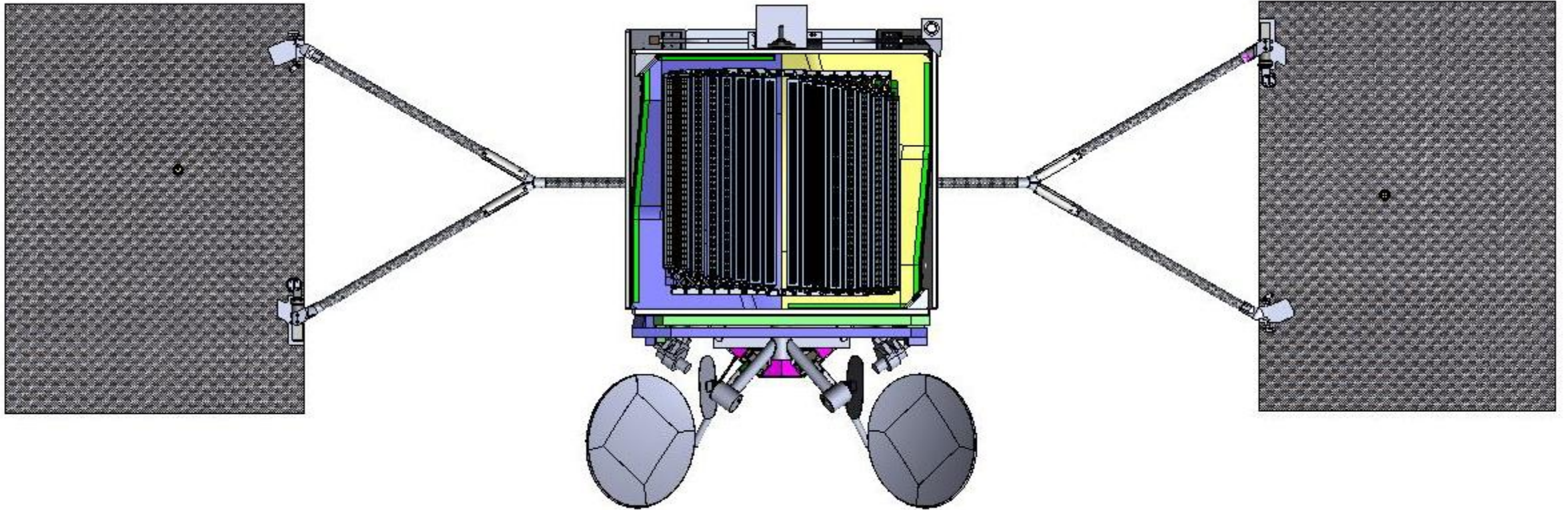
# Instant and constant infrastructure







# OneWeb Satellites – 900 Vehicle Production



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21 Soyuz + 5 Options

Ariane 6

39 Virgin Galactic

















How do you enable  
connectivity for everyone?



How do you enable  
connectivity for everyone?

*Empower communities to build  
their own networks*