

# Global Eagle

Satcom Vision  
Ankara, Turkey  
29 November 2018

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**Global Eagle are experts and thought leaders in serving a world on the move. Through digital transformation, we are creating an automated, cloud based network, optimizing satellite technology, to deliver next generation experiences.**

# Broad, Deep and Integrated

## Passenger Solutions (PX)

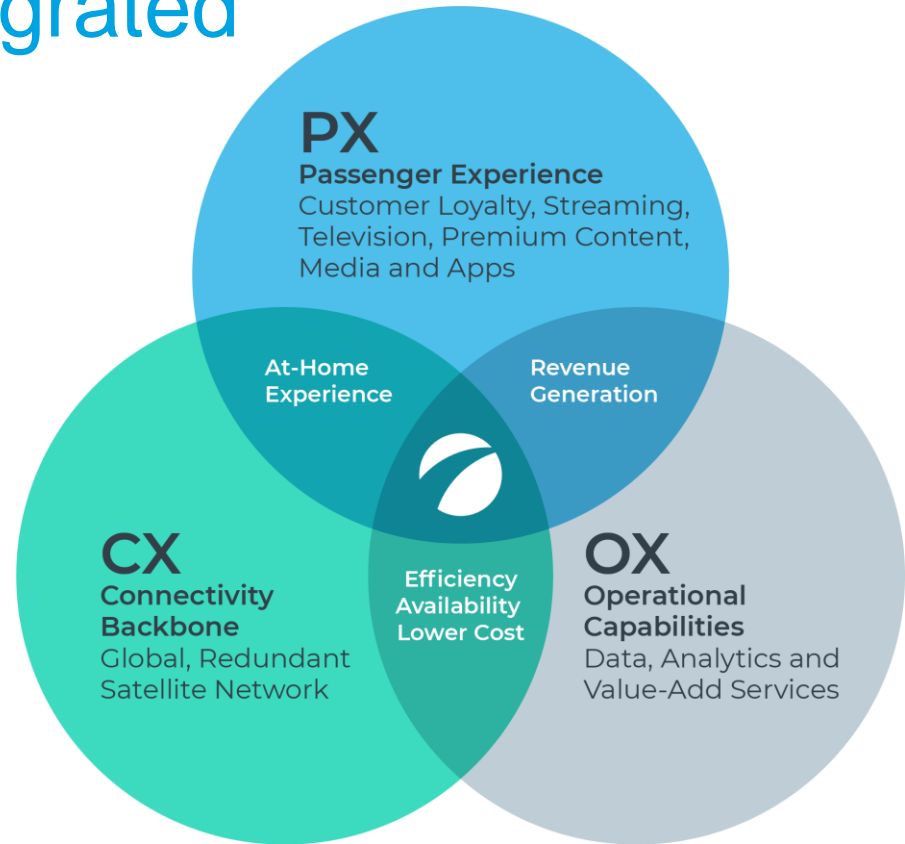
- Flexible customer gateway (portal)
- Premium Media/Content & TV
- Digital Solutions

## Connectivity Solutions (CX)

- Integrating diverse satellite operators with our open architecture platform
- Global Eagle optimizes network for streaming & operational data
- Competitive satellite supply chain drives cost reduction over time

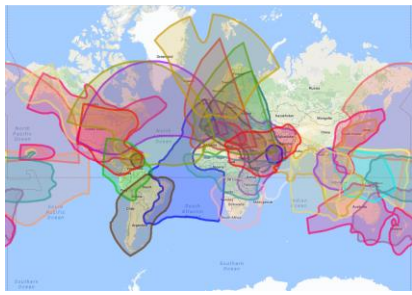
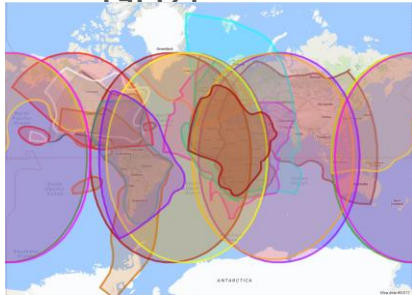
## Operational Solutions (OX)

- Data management, analytics & optimization
- Aircraft Interface Device (AID)



# Why the Global Eagle satellite and network solution is relevant?

- Comprehensive global network
- Best in class ground MPLS network
- Most efficient satellite infrastructure and resources
- Resilient network of 30+ teleports located worldwide
- 3 teleports wholly owned by Global Eagle :  
Santander, Spain, Raisting, Germany, Homdel, USA
- Enormous satellite agnostic space constellations (> 13 GHz)



## Aviation Capabilities

- Largest satellite connectivity provider for single-aircraft
- Boeing Linefit for Boeing 737 NG and MAX aircraft
- Airbus A320 FAM retrofit
- Airline-customizable portal and advertising
- Operational analytics and business intelligence
- Cockpit integration with data transmission



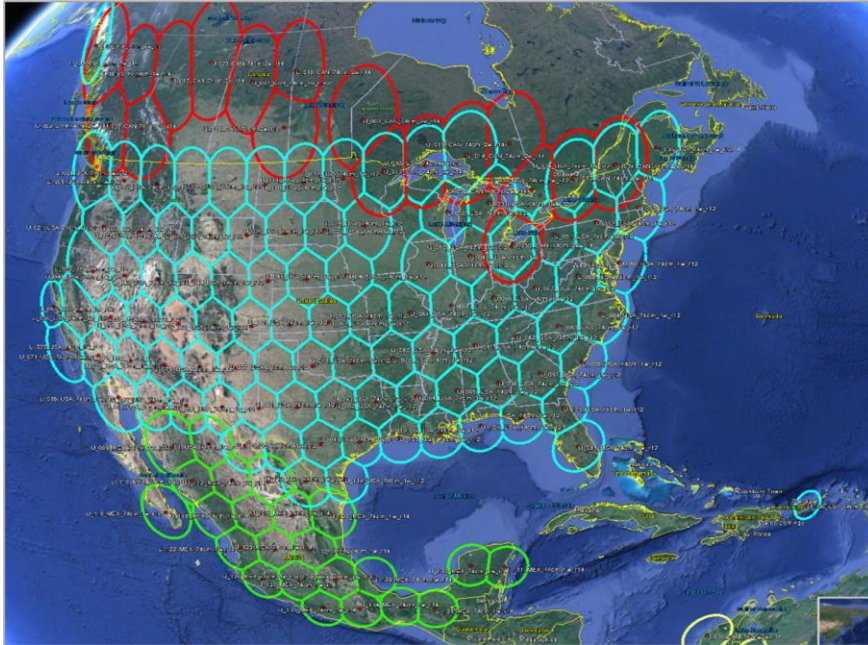
## Maritime and Land Capabilities

- Connecting 1,000 vessels and 3,400 land sites
- Leading position in cruise (Internet & television)
- End-to-end concierge services for large yachts
- Major contracts with United Nations and US military



# Start With Ka-Band GEO

Hughes Jupiter-1 and Jupiter-2  
>300 Gbps total capacity

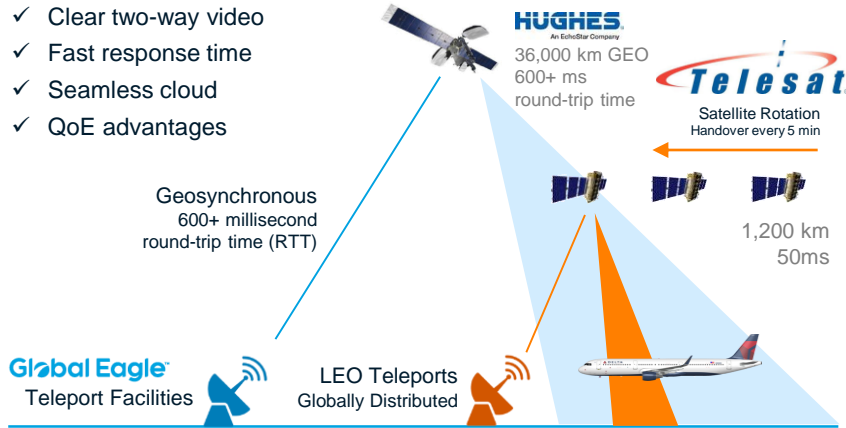


- 300 Gbps of available capacity, first priority access to bandwidth
- Spot beams for CONUS, Canada, Mexico, Central America, Caribbean
- 2.5 Gbps peak beam capacity
- Enhanced beam switching
- Future capacity on Jupiter-3 and SES-17 Ka-band satellites
- For 2018-2020, supplemental coverage and capacity from:
  - Telesat Anik Ka-band

# Grow into LEO and MEO Platforms

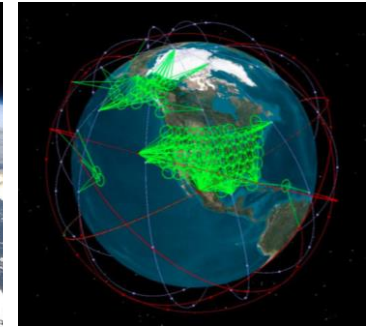
## High Performance

- ✓ Clear two-way video
- ✓ Fast response time
- ✓ Seamless cloud
- ✓ QoE advantages



- Global Eagle uses MEO in Maritime & Land
- Global Eagle conducted successful LEO flight testing in Q4 2018 with Telesat test satellite
- Testing confirmed GEO to LEO handoff and low latency benefits

## Focused Capacity Where Needed

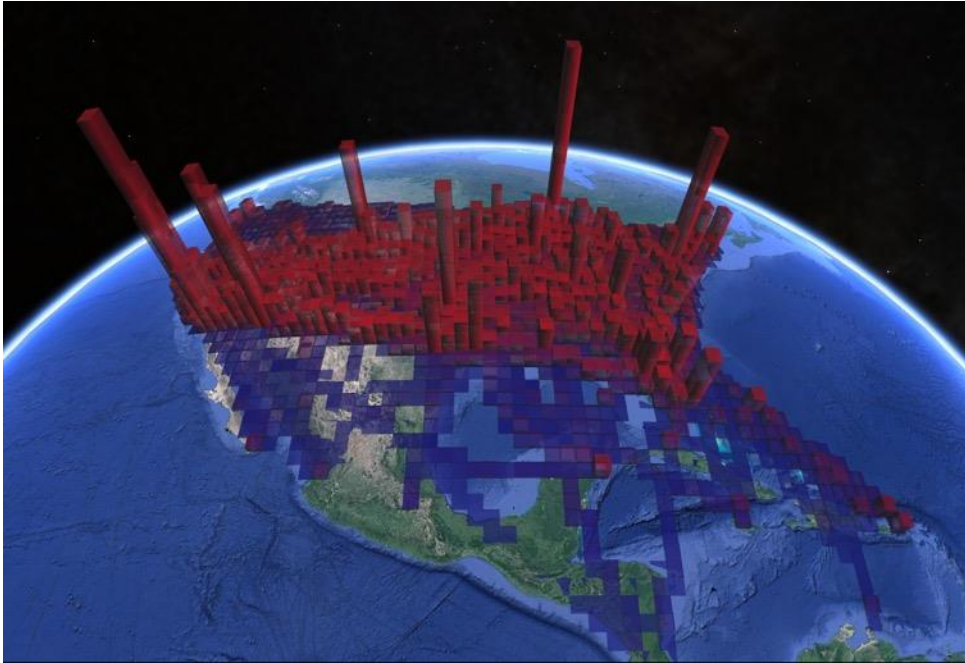


Planned LEO coverage at full deployment

- 100% global coverage (including polar & oceanic routes)
- Spot beams provide high capacity coverage (multiple Gbps per beam)
- Low latency, streaming-class

# Scalable Regional Capacity – Gate-to-gate

*Geographic illustration of actual data consumption (900 aircraft)*

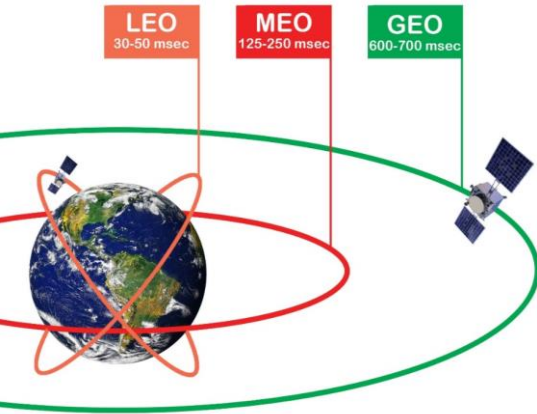


- Passenger data consumption is 25x higher over major airports where we provide gate-to-gate service
- This pattern requires network design to focus capacity over airports without wasting capacity in low-utilized areas
- Challenge – Single Satellite will be challenged to support

# Comparing Orbits

## Leveraging open architecture to integrate multiple orbits

*Combining LEO, MEO and GEO networks provides lowest risk, greatest scalability*



	LEO (Low Earth Orbit)	MEO (Medium Earth Orbit)	GEO (Geostationary Equatorial Orbit)
Capacity density	Highest (100x GEO)	High	Medium
Latency	Ultra Low <50ms	Medium 150-250ms	High >600ms
Cost	Lowest	Premium	Competitive
Coverage	Full global coverage	Poor or no coverage at higher latitudes	No polar coverage
Resilience	High (4 per Aircraft)	Medium (2 per Aircraft)	Single Satellite
Platform	Standards Based	Closed Architecture	Varies
# of Satellites	200 or more	10 or more	Varies





Thank you

