Airbus Defense and Space
Enabling Large LEO Constellations
Global Leader in Space Systems and Services

Telecommunication Satellites
Earth Observation Satellites
Space Equipment
Human Spaceflight
Space Exploration & Science
Navigation Satellites
On-Orbit Services
Ground Segments
Launchers

... and a complete range of Space-based Services in our “Communications, Intelligence and Security (CIS)” business line.
Enabling Low Earth Orbit Mega Constellations

In 2018 Airbus delivered

- 24 satellites
- European Service Module

This is our last year for double digit satellite deliveries. With the mass production of small, lower-cost satellites for OneWeb starting in 2019, satellite deliveries will be in the triple digits.

Tom Enders
Airbus OneWeb Satellites Joint Venture

Closing the Digital Divide

OneWeb satellite

Manufacturing facility in Florida
Revolutionizing Satellite Manufacturing

• Design for manufacturability

• Design for test

• Design for cost

• Supply chain management

• Flexible manufacturing facility to build other satellites
Florida Manufacturing Facility – Open for business

- Located near Kennedy Space Center
- Adds two manufacturing lines to the current line in Toulouse
- Ready for production in early 2019
Enabling New Applications

OneWeb constellation: 600 - 900 satellites

Targeting new applications

- Position, Navigation and Timing (PNT)
- Earth Observation with high revisit
- Radio Frequency sensing, tracking
- Communications and IoT/M2M
- Other opportunities: Tug, ADR...

OneWeb constellation:
600 - 900 satellites

PNT (Position, Navigation, and Timing) – GPS / Galileo augmentation or alternatives
Active Debris Removal (ADR)

Earth Observation with high revisit

Radio Frequency sensing, tracking

Communications and IoT/M2M

Other opportunities:
Tug, ADR...

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OneWeb Ground Segment

- 600+ Satellites
- Ka Gateway and TT&C links
- Ku User Links
- Worldwide Gateway Antennas
- Worldwide User Terminals
- Dedicated TT&C Antennas
- Wide Area Networks connect facilities
- Network Operations Centers (NOC)
- Satellite Operations Centers (SOC)

Designed and built by OneWeb and its contractors
Summary

• Airbus brings a large portfolio of satellites, space hardware and services to the global market place

• Airbus is developing a unique and proven satellite manufacturing capability for large low-Earth constellations in the US and is committed to additional growth in the US
Thank you

Tim Deaver
Director US Space Programs
Airbus Defense and Space, Inc.