



# **Bartolomeo** **Your Space Program on the International Space Station – how UN member states can utilize 'Bartolomeo'**

**Johannes von Thadden**  
**Senior Vice President**

DEFENCE AND SPACE

UNOOSA Presentation  
Vienna, February 6, 2018

**AIRBUS**

# BARTOLOMEO

Named after the younger brother of Christopher Columbus, the Bartolomeo platform is attached to the European Columbus Module and operated by Airbus.

## MISSION

Bartolomeo operated aboard the ISS in **low-Earth-orbit** (altitude: ~400 km)



### • Bartolomeo in operation:



The ISS' only unobstructed view of Earth and outer space...



... and enables the hosting of external payloads in low-Earth-orbit

### • Main applications:



Earth observation



Robotics



Material science



Astrophysics

### • Payloads can be hosted for

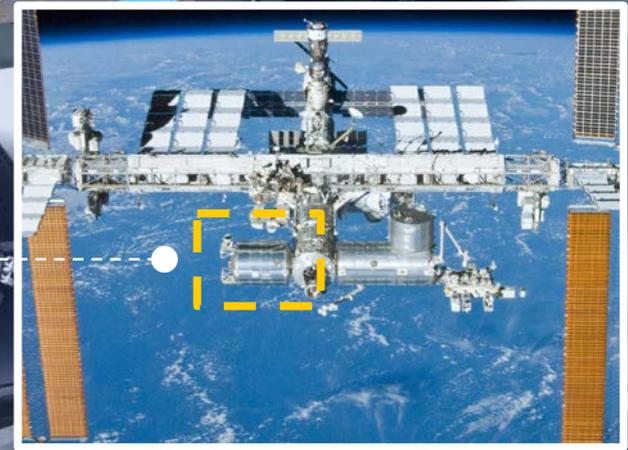
institutional



and private organisations



European Columbus Module



Various payload sizes available

Best viewing conditions

High performance data link

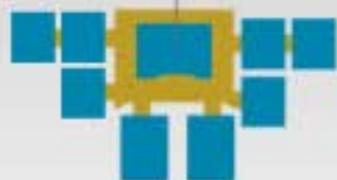
AIRBUS

- Provides **simplified, cost-effective** access to space
- Enables **fast-track, responsive missions** to be performed in Low Earth Orbit
- Facilitates and accelerates technology development and **space capability build-up**
- Is versatile, with **many types of payloads and missions** possible
- Creates **opportunity for new business** applications **addressing development goals**



## 12 Payload slots

GOLD-2 (General Oceanneering Latching Device 2) attachments for payloads up to 450 kg and 1 m<sup>3</sup>



## LAUNCH OPPORTUNITIES

Are available on every servicing mission to the ISS



i.e. approximately every **3 months** (average)



Payloads can be launched pressurised or unpressurised



High performance optical data downlink  
**1 – 2 Terabyte /day capacity**  
is available during launch and in Space



Versatile payload accommodation in the  
**5 – 450 kg range**

## HIGHLY COST-EFFICIENT

Thanks to the low-cost mission approach, customers can

### save costs

significantly compared to traditional mission costs.

This opens up opportunities for a variety of new types of applications and makes Bartolomeo ideal for R&D missions



## EASY MISSION PREPARATION

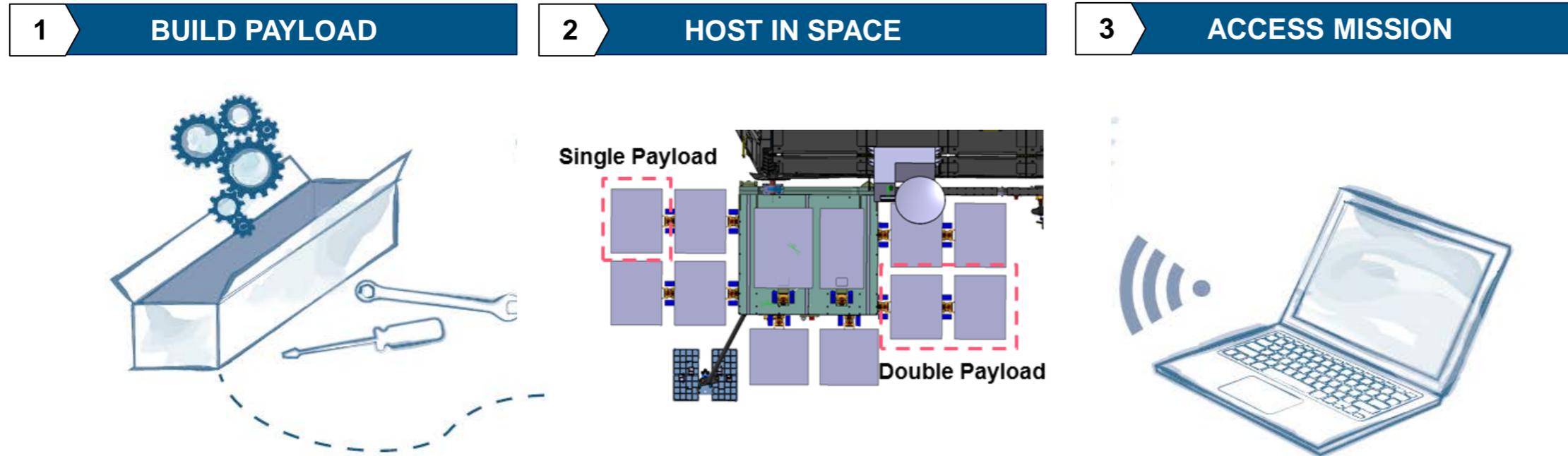


Payload sizes, interfaces, preparation steps and integration processes are largely standardised, meaning lead times



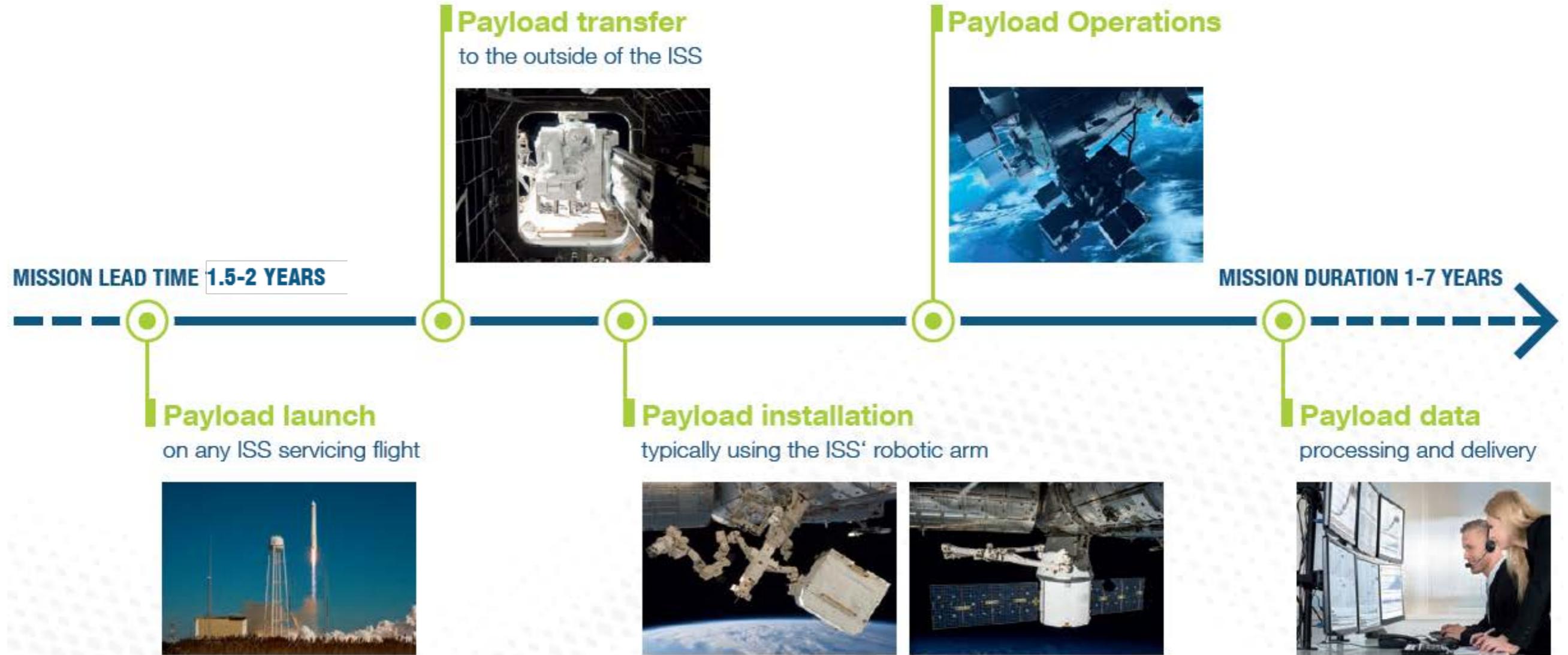
**12 months**

# Bartolomeo – All-in-One Space Mission Service

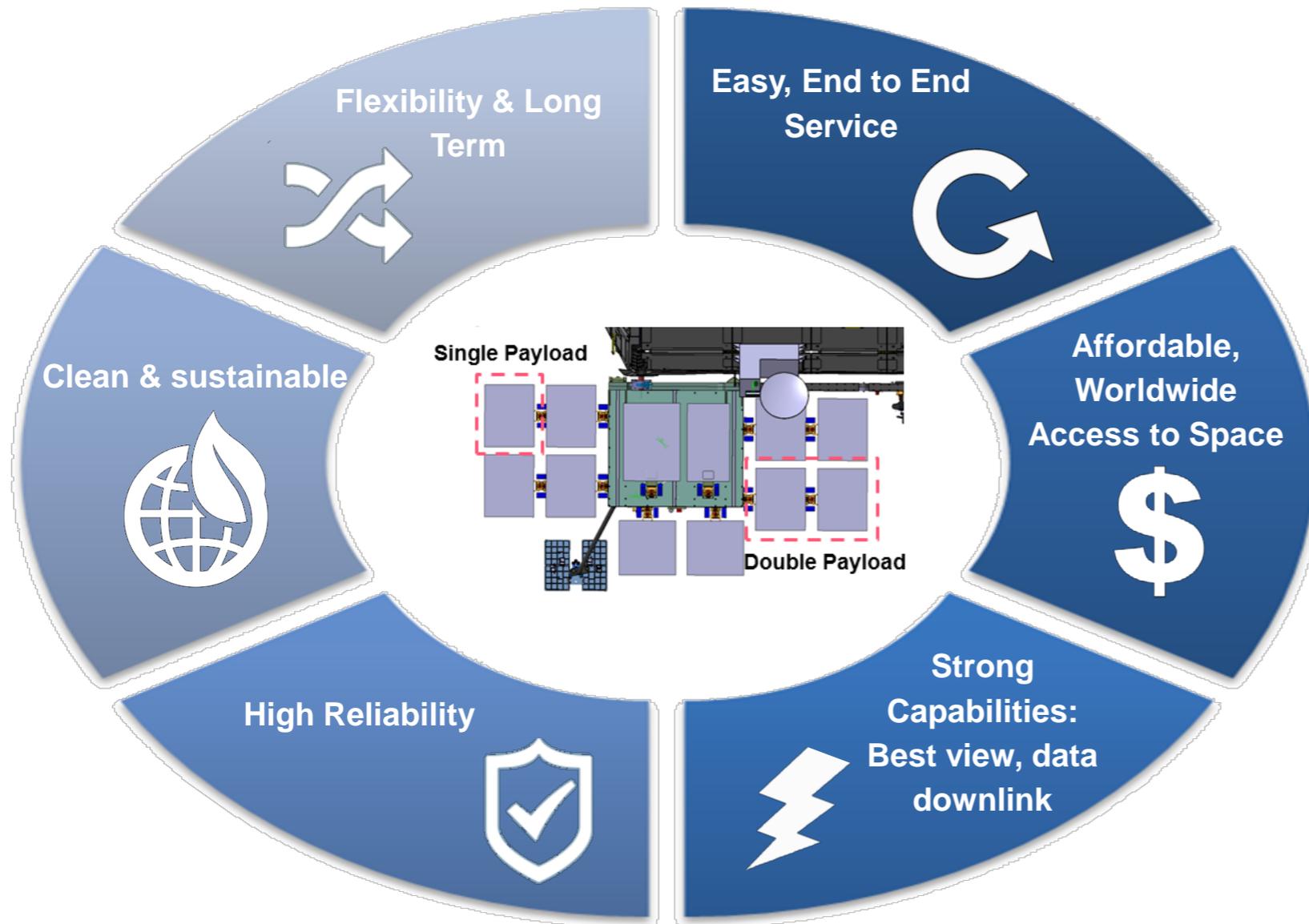


- 1** Payload customers provide their payload to be hosted on Airbus Bartolomeo platform, with Airbus guidance through the ISS safety reviews
- 2** Airbus provides launcher integration, launch facilitation, installation and hosting on BTL, data provision
- 3** Payload customers receive their data and operate their mission via the web-based Airbus Cloud Console from anywhere in the world

# Bartolomeo – All-in-One Space Mission Service



# Bartolomeo Value Proposition and benefits of UNOOSA collaboration



- Create an impetus in the payload development community to **address Sustainable Development Goals**
- Facilitate **access** for developing nations **to funding sources**
- **Raise awareness** of this opportunity in non-space nations
- Enable educational initiatives, **space capability build-up** and consultancy services
- Foster **international, intercultural collaborations**

## Bartolomeo Contacts

Dr. Christian Steimle  
Bartolomeo Program Manager  
Airbus Defence and Space, Bremen, Germany  
Email: [per-christian.steimle@airbus.com](mailto:per-christian.steimle@airbus.com)  
Mobile: +49 151 277 677 74  
<https://de.linkedin.com/in/dr-per-christian-steimle-46217b8a>

Katherine Pegg  
Business Capture and Service Operations Manager  
Airbus Defence and Space, Bremen, Germany  
Email: [katherine.pegg@airbus.com](mailto:katherine.pegg@airbus.com)  
Mobile: +49 162 904 6726  
<https://www.linkedin.com/in/katherinepegg>