Bartolomeo

New External Payload Platform on the International Space Station Technical Briefing Part 1

DEFENCE AND SPACE

Dr. Christian Steimle 26 February 2019



Airbus Offer in this Opportunity

- > 3U-sized payload will be integrated, launched, installed as part of the Bartolomeo / ArgUS Multi-Payload Adapter system free of charge
 > 1U = 10 x 10 x 10 cm
- > Mission operation 1 year is included

Optional Services:

- Larger payload sizes and longer mission durations are available at 80,000 USD / U / year
- > Payload return available at 80,000 USD / kg
- Broadband data downlink capability available at extra charge TBD
- > Any support with payload development, testing, customs, logistics is available at extra charge TBD

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Items to be Delivered by the Applicant

> Mission Information for ISS Partners

- Short summary of the activity in the targeted Bartolomeo payload facility, including the research scope and objectives
- Description of the experimental setup and provided payload
- General description of the expected scientific deliverables (e. g. returned samples, sensor data)
- Description of the end-to-end mission, duration, timeline
- Series Programmatic status, hardware development status, target turnover date and desired on-orbit performance window

> Initial Payload Specification

- └ Preliminary payload property data (mass, dimensions)
- Solution Power consumption data (peak, average, minimum)
- └ Volume of data up/downlink required (estimate);
- Section Payload orientation requirements;
- Section Sectio
- └ Emissions (type, quantity if applicable)
- Substances inside/hazardous materials
- └ Margins in case of launch delays
- └ On-orbit operations start constraints
- Project schedule



Items to be Delivered by the Applicant

- > The Applicant agrees to furnish Airbus with all necessary material and data required to assure compliance with the *Bartolomeo* interface requirements and NASA safety regulations.
- > The launch and insertion of a payload on the *Bartolomeo* platform may be subject to regulatory requirements. The Applicant needs to ensure compliance with any and all applicable domestic and/or international regulations.



Risk Sharing between Applicant and Airbus / UNOOSA

Some or all aspects of the space flight program, including the flight opportunity and the launch date, the time on-board ISS, the insertion onto the *Bartolomeo* platform, the ability of the crew to interface with the payload, or the specific mission that will carry the payload may change in date or duration, or become unable to be realized. In the following potential situations the payload deployment may be affected outside the control of Airbus:

- > Cancelled flight opportunity; Airbus will reschedule the flight together with ESA
- > Launch failure resulting in the loss of the Customer payload; a free re-flight will be offered, but the payload value should be insured by the Applicant
- > Mission becomes unable to be realized due to any change in policy, procedure or agreement instituted by ESA or NASA or any organization; risk to be born by the Applicant
- > Customer payload failure; payload functionality is in the responsibility of the Applicant
- > Airbus and its commercial partners do not retain any **intellectual property rights** from data, research or commercial products resulting from the payload mission; the Applicant may protect his intellectual property
- > ESA or NASA priorities may impact Customer's priority and use of the ISS; the Applicant acknowledges that the availability of these ESA or NASA resources may be outside the authority and control of Airbus.



Contact

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

Key Account Manager International Organizations Airbus Defence and Space, Ottobrunn, Germany Email: simone.sasse@airbus,com Mobile: +49 160 708 56 91 https://www.linkedin.com/in/simone-sasse-639a46b2