



Space Applications Services is a developer and integrator of systems and payloads for the International Space Station (ISS) and lunar destinations. We serve Agencies and large-scale integrators as well as individual customers and New / Commercial Space players.

The company develops and operates space systems, including robotic and rover systems, complete ground segment solutions, including control centres and provides integration, operations and astronaut/ground personnel training services. The company meets the needs of US customers through Aerospace Applications North America, incorporated in Texas.

Space Applications Services has more than 30 years of heritage in Human Spaceflight, including performance of operations and the training of astronauts. It has more than 20 years of heritage in Robotics and Mechanisms for ISS, other spacecrafts and exploration.

With direct relevance to CONFERS:

- **HOTDOCK** is a Standard Interface device for robotic manipulation providing redundant mechanical, power, data and thermal coupling capabilities between payloads and spacecraft or between spacecraft modules. HOTDOCK is an essential building block to support the emerging LEO/GEO robotic servicing market (spacecraft maintenance and reconfiguration, large structures assembly in space). The product is also targeted to support the robotic needs of future exploration missions (LOP-G, Moon and Mars surface operations). HOTDOCK has been adopted as the Standard Interface to be used in three projects of the European Commission's Space Robotic Program:
  - MOSAR – Modular spacecraft assembly and reconfiguration using a walking manipulator – developing, integrating and demonstrating technologies to enable spacecraft on-orbit reconfiguration and maintenance.
  - PULSAR – In space assembly of a large telescope mirror – designing and demonstrating technology for on-orbit precision assembly of mirror tiles of a very large space telescope by an autonomous robotic manipulation system.
  - PRO-ACT – Planetary ROBots Deployed for Assembly and Construction Tasks – developing and demonstrating cooperation and manipulation capabilities between robots for assembly of an in-situ resource utilisation (ISRU) plant.

A batch of 50 units of HOTDOCK will be delivered to these projects in early 2020. Interested companies can also request an evaluation unit of HOTDOCK.

- **DexOPS** is an haptically enabled dual arm ground exoskeleton system for control at a distance under conditions of latency (validated with subsea vehicles and suitable for on-orbit applications).
- **InFuse** is an on-board sensor data fusion software framework combining data from multiple sensors for on-orbit servicing and rendez-vous proximity operations.

More information available on our websites:

<http://www.spaceapplications.com>

<https://www.aerospaceapplications-na.com/index.html>

<http://www.icecubesservice.com>