

NASA announces opportunities to advance 'tipping point' and emerging space technologies

May 22 2015, by Joshua Buck





NASA announced Thursday two opportunities for public-private partnerships to achieve the agency's goals of expanding capabilities and opportunities in space. Through both solicitations, NASA is seeking industry-developed space technologies that can foster the development of commercial space capabilities and benefit future NASA missions.

"These solicitations form an increased focus on collaborations with the commercial space sector that not only leverage emerging markets and capabilities to meet NASA's strategic goals, but also focus on industry needs," said Steve Jurczyk, associate administrator for the Space Technology Mission Directorate at NASA Headquarters in Washington. "While developing the technology to enable NASA's next generation of science and human exploration missions, we will grow the economy and strengthen the nation's economic competitiveness."

Through the solicitation titled "Utilizing Public-Private Partnerships to Advance Tipping Point Technologies," NASA seeks to advance selected technologies with the goal of enabling private industry to develop and qualify them for market without further government investment.

A technology is considered at a tipping point if an investment in a demonstration of its capabilities will result in a significant advancement of the technology's maturation, high likelihood of infusion into a commercial space application, and significant improvement in the ability to successfully bring the technology to market. These technologies also should bring substantial benefit to both the commercial and government sectors on completion.

NASA is soliciting proposals for technologies that enable or provide:

- robotic, in-space manufacturing and assembly of spacecraft and space structures;
- low size, weight and power instruments for remote sensing



applications;

- small spacecraft attitude determination and control sensors and actuators; and,
- small spacecraft propulsion systems.

Submissions for the tipping point solicitation are due by July 23. Funding will occur through milestone payments as part of fixed-price contracts that require a minimum 25 percent corporate or customer contribution.

The "Utilizing Public-Private Partnerships to Advance Emerging Space Technology System Capabilities" solicitation seeks partnerships focused on industry-developed space technologies that can advance the commercial space sector and benefit future NASA missions. NASA's investments in industry partnerships can accelerate the availability of, and reduce costs for the development and infusion of, these emerging space system capabilities. NASA will provide technical expertise and test facilities, as well as hardware and software to aid industry partners in maturing technologies that can enable or enhance space vehicle systems or other closely related subsystems.

For this solicitation, NASA is looking for technologies in the areas of:

- suborbital reusable and small satellite launch systems development;
- wireless power transfer development;
- thermal protection system materials and systems development;
- green propellant thruster technology qualification; and,
- small, affordable, high performance liquid rocket engine development.

Submissions for this solicitation are due by July 30. Awards will be made in the form of non-reimbursable Space Act Agreements.



Proposals must be spearheaded by U.S. private industry. NASA expects to select about 20 proposals between the two solicitations, worth a combined total of approximately \$50 million to U.S. industry.

More information: To view the solicitations and related information, visit: go.nasa.gov/lefFtmG

Provided by NASA

Citation: NASA announces opportunities to advance 'tipping point' and emerging space technologies (2015, May 22) retrieved 4 May 2024 from https://phys.org/news/2015-05-nasa-opportunities-advance-emerging-space.html

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