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## NASA and TTTech sign Space Act Agreement

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### NASA and TTTech to Partner on Networking Standardization

Houston, TX and Vienna, Austria – April 14, 2009

**NASA and TTTech, the leading supplier of dependable networking solutions based on time-triggered technology, have signed a "Space Act Agreement". The objective of this partnership is to support NASA's technology needs for design of highly dependable integrated embedded systems. This agreement is in line with NASA's strategy to establish partnerships with the private sector in order to encourage innovation and advance space exploration.**

The collaboration between NASA and TTTech will result in an open Ethernet-based standard suitable for deployment in upcoming NASA programs and space systems. TTTech has developed a new network technology named TTEthernet, combining commercial available Ethernet infrastructure with TTTech's time-triggered services.

Commercially available products, technologies and standards such as TTEthernet help to protect system design investments and can generate significant savings in capital-intensive programs over very long life-cycles. TTEthernet's focus is on mission-critical, safe and secure applications in various industries, including commercial aerospace, space and defense applications. TTEthernet's scalability also enables deployment in high-volume cross-industry applications, such as telecommunications, automotive or medical electronics, which can take advantage of the most advanced validation and verification procedures used in aerospace applications.

"We look forward to realizing the potential of TTEthernet technology development, which provides a high bandwidth avionics databus capability supporting future technology insertion over Constellation's multi-decade mission," Thomas W. Rathjen, Program Executive for Orion and Ares I-X, Constellation Systems Division, Exploration Systems Mission Directorate.

"We are proud to be chosen by NASA as a technology partner to support deployment of advanced Ethernet-based system integration technologies," states Georg Kopetz, Managing Director of TTTech "We're looking forward to working with NASA under the cooperative Space Act Agreement and are excited about this great opportunity".

TTEthernet provides a set of time-triggered services implemented on top of standard IEEE802.3 Ethernet. Those services are designed to enable design of synchronous, highly dependable embedded computing and networking, capable of tolerating multiple faults. With TTEthernet, robustly partitioned multimedia data streams, critical control data and standard LAN messages can operate in one network without unintended congestions or interactions. This enables handling of mixed level criticality functions in complex Ethernet-based networks, effectively circumventing limitations of Ethernet technology for design of advanced integrated systems.

## About TTTech Computertechnik AG

TTTech Computertechnik AG is the leading supplier of solutions in the field of time-triggered data communication. The company's products improve the safety and dependability of networked computer systems in transportation and automation industries. The solutions are based on TTP<sup>®</sup> and TTEthernet<sup>™</sup>. FlexRay<sup>™</sup> offerings are provided by TTTech's subsidiary, TTTech Automotive.

Standard software and hardware products are complemented by worldwide product and project support to efficiently develop and implement distributed embedded systems. TTTech's product range enhances the approach to handle safety-critical data communication with respect to cost, safety, and development efficiency. TTTech especially enables by-wire and integrated vehicle control systems and supports the reduction of system life-cycle cost and complexity.

Further information on TTTech is available at [www.tttech.com](http://www.tttech.com).

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