

NASA SBIR/STTR Technologies

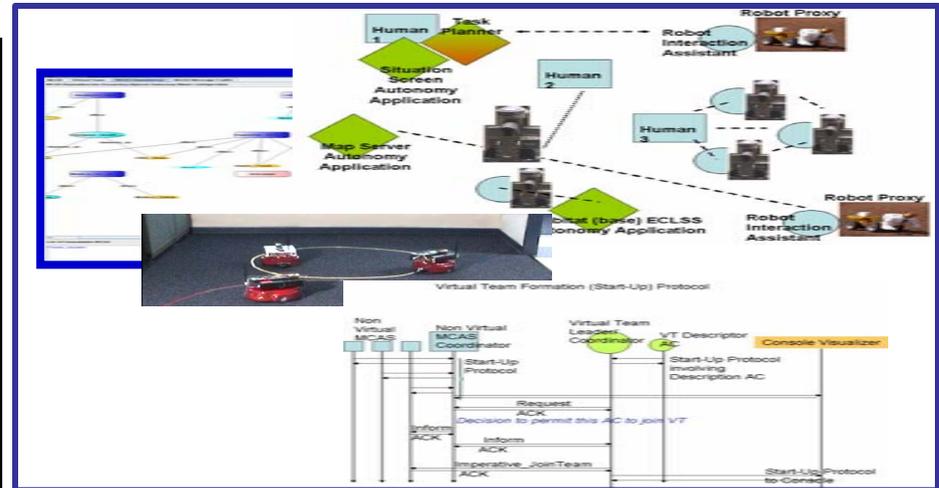
Title: Integrated Protocol-based Framework Support for Mixed Initiative Human-Robot Teams in Space Exploration

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Contract No: NNJ07JB29C



The proposed Human-System Interaction Framework (HSIF) supports protocol-based interactions among Mixed Initiative Human-Robot Teams as well as among Human and Robot Team and Multiple Component Soft-bot Autonomous Applications.



HSIF incorporates ‘conversational’ protocols that reflect the commitment behavior necessary among team members to achieve unambiguous and robust interactions. HSIF includes design requirements to support interaction, a Protocol Library and interaction/ visualization consoles. Selected protocols are integrated with robotic software and implemented on robotic platform.

2 Year SBIR Phase II Deliverables:

HSIF Protocols and Design,
 Protocol Library (software),
 Integration of protocol with robotic software
 & implementation on robotic hardware,
 Simulation of Protocols and Autonomous

NASA and Commercial Applications Systems
NASA

Space Exploration

Other Applications

DoD Applications

US Coast Guard

NON-PROPRIETARY DATA