

Security-Enhanced Autonomous Network Management for Space Networking

Intelligent Automation Inc Rockville, MD

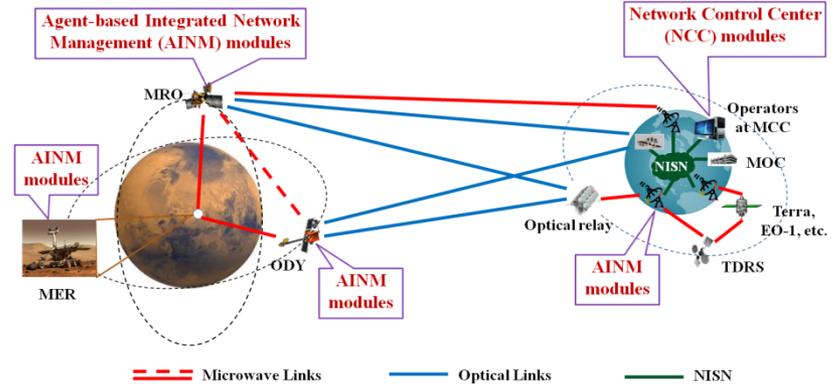
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Proposal No.: 10-1 O1.06-8084

Identification and Significance of Innovation

The proposed SEANM scheme provides an autonomous network management for space networking through an efficient cross-layer negotiation approach.

Estimated TRL (1 – 9) at beginning and end of contract: 1-3



Technical Objectives and Work Plan

Prototype a Security-Enhanced Autonomous Network Management system and Demonstrate Its Feasibility for Space Networking.

- Design and refine the SEANM architecture
- Investigate cross-layer information sharing, cross-layer interactions, and root-cause dependencies
- Customize the cross-layer reconfiguration mechanism
- Investigate and design security solutions
- Demonstrate feasibility of the prototype system

NASA and Non-NASA Applications

NASA: Space Communications and Navigation Program (SCaN)

Non-NASA: Airborne Networks, Joint Strike Fighter, Warfighter Information Network-Tactical (WIN-T), Joint Tactical Radio System (JTRS)

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