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Knowledge Management and Collaboration in Space Activities (2)

Author: Prof. Jeanne Holm  
University of California, Los Angeles, United States, Jeanne.Holm@jpl.nasa.gov

Mr. Gregory L Robinson  
National Aeronautics and Space Administration (NASA), United States, Gregory.L.Robinson@nasa.gov

Mr. Harold Bell  
National Aeronautics and Space Administration (NASA), United States, Harold.M.Bell@nasa.gov

Mr. Manson Yew  
National Aeronautics and Space Administration (NASA), Jet Propulsion Laboratory, United States,  
Manson.Yew@jpl.nasa.gov

DRIVING INNOVATION IN ENGINEERING AT NASA

**Abstract**

The NASA Engineering Network (NEN) applies the latest knowledge management technologies and organizational practices to institutionalize NASA's experiences and enhances a NASA engineer's competencies and growth. NEN provide the NASA engineer with engineering portals to integrate the necessary documents, tools, and engineering resources, including NASA's Lessons Learned, to help them solve problems and design solutions more efficiently. Most importantly, it helps engineers identify innovative solutions to challenges by bringing together people from different locations, disciplines, and backgrounds.

NEN integrates the Agency-wide resources to enhance the capabilities of all engineers not only by managing engineering knowledge and lessons learned, but also by incorporating them into NASA's engineering requirements, principles and standards, and providing training and compliance support. This includes the rich resources available to engineers, such as technical standards, risk management support, learning, and project management support. NEN also provides collaboration tools to facilitate creating, reviewing, and disseminating requirements and specifications, as well as an expertise locator (built on open source standards and using semantic web technologies) to assist in finding the best collaboration partner from across NASA to help engineers complete their tasks. All of these services are tied into the NASA knowledge management infrastructure, taxonomy, and plans.

NEN provides a practical system that institutionalizes NASA's experiences and enhances a NASA engineer's competencies and growth, and incorporates the latest technology in integrating lessons learned, and presents knowledge in a unified interface to the engineering community. NEN provides engineers with a robust system where knowledge gained from past experience can continue to be applied to current and future projects.