Clarence Eder, J Aeronaut Aerospace Eng 2015, 3:3
http://dx.doi.org/10.4172/2168-9792.S1.007

OMICS International
conferenceseries.com

International Conference and Exhibition on
Satellite

August 17-19, 2015 Houston, USA

Beyond integration readiness level (IRL): A multi-dimensional framework to facilitate integration of system of systems

Clarence Eder
George Washington University, USA

Integration readiness level (IRL) was introduced to help understand the maturity of integrating different systems. The need to expand the use of IRL is increasingly becoming relevant in the United States' Department of Defense (DoD) Acquisitions as programs try to acquire systems with the intent to have multiple capabilities and interfaces. As DoD continues to reduce the budget for weapon systems acquisitions along with the need to expedite the deployment of capabilities into operations, the need to improve systems engineering processes is critical with program decisions. DoD acquisitions adopted the use of Technology Readiness Level (TRL) in 2002 to explain the maturity of a system based on the technology used for that system. IRL was later introduced as an integration tool to complement TRL, but IRL was never implemented in DoD acquisitions. IRL could become a necessary tool to help reduce integration risks of complex systems. DoD space acquisitions continues to provide examples of complex system of systems. With very limited opportunities to do operational tests and analyses for satellite systems and rocket launches, space systems provide a platform to incorporate the latest technologies and processes to attain successful operational systems. The current research is to show the effectiveness of IRL in facilitating integration of system of systems. The research will focus on understanding and identifying integration issues and challenges of space systems, and developing weighted variables. The weighted variables will be included as part of a systems integration architectural framework, this will be used as the research methodology.

Biography

Clarence Eder works as a Principal Acquisitions Associate for Quantech Services Inc. supporting the United States Air Force Space and Missiles Systems Center in El Segundo, CA. He is also a Systems Engineering PhD candidate at George Washington University. He completed his Bachelor of Science degree in Mechanical Engineering at the University of Hawaii, his MBA at Wright State University and his Systems Engineering Graduate Certificate at George Washington University.

edercl@gwu.edu

Notes: