System of Systems Engineering
Collaborators Information Exchange (SoSECIE)

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System of Systems Engineering
Model-Based Capability Planning and Enterprise Portfolio Management
Presenter: Dr. James N. Martin

Capabilities, the lifeblood of an enterprise, can be managed effectively using portfolio management techniques. Capability roadmaps are commonly used to manage the deployment of new and improved capabilities to address key drivers and challenges that the enterprise faces. This paper shows how MBSE can enhance an organization's ability to plan for capability deployments, as well as the ability to more effectively manage its portfolios of systems, services, people, technologies, processes, facilities, and other key enablers for the fielded capabilities. Specific enterprise modeling elements that can facilitate capability planning and portfolio management are presented. These new modeling elements are being incorporated into an update of the Unified Architecture Framework, an OMG standard for modeling an enterprise.

Biography

James N Martin is a member of the UAF Revision Task Force with OMG and was lead editor for the ISO 42020 standard on Architecture Processes. He is an Enterprise Architect and a Distinguished- Systems Engineer at The Aerospace Corporation developing solutions for information systems and for space domain enterprises. He was a key author on the BKCASE project in development of Enterprise Systems Engineering articles for the SE Body of Knowledge (SEBOK). Dr. Martin led the working group responsible for developing ANSI/EIA 632, a US national standard that defined the processes for engineering a system. He previously worked for Raytheon Systems Company and AT&T Bell Labs on airborne and underwater systems and on mobile telecommunication systems. His book, Systems Engineering Guidebook, was published by CRC Press in 1996. Dr. Martin is an INCOSE Fellow and was leader of the Standards Technical Committee. He was founder and was until recently leader of the Systems Science Working Group. He received from INCOSE the Founders Award for his long and distinguished achievements in the field.