Systems Acquisition and Integration

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Abstract

Principles of systems acquisition and integration guide the system development process and hopefully contribute to the success of the process as well as resulting products. This tutorial examines acquisition guidelines in detail, especially those supported by the U. S. Department of Defense. It also explores integration notions, from those that are recommended to those that tend to lead to difficulties. Relationships between acquisition guidance and integration responses are presented. A summary stresses key principles to be considered by the practicing systems engineer and also the value of utilizing these principles. Selected topics include: the DoD 5000 series, the DAPA report, capability-based acquisition, the "top five" systems and software issues, interoperability, and a "top dozen" integration list.

Biography

Dr. Howard EISNER, USA, came to The George Washington University in 1989 after 30 years in industry as a research engineer, manager and president of two systems engineering companies. He has written five books on systems engineering, management, and related topics. He currently holds the position of Distinguished Research Professor and Professor in the Engineering Management and Systems Engineering Department. He is a Life Fellow of the IEEE, and a Fellow of INCOSE and the New York Academy of Sciences. He is a member of Tau Beta Pi, Eta Kappa Nu, Omega Rho and Sigma Xi. In 1994, he was given the Outstanding Achievement Award from the GWU Engineering Alumni.