



# **IEEE CONFERENCE ON SYSTEMS OF SYSTEMS**

**Holiday Inn Riverwalk  
April 16-18, 2007  
San Antonio, Texas, USA**



**Carl R. Siel, Jr.**  
Chief Engineer  
Office of the Assistant Secretary of the Navy

## **Keynote Title:**

**Systems of Systems Engineering in a System Centric Environment  
Chair: Bret Michael, Naval Postgraduate School, USA**

## ABSTRACT

Our successes in fielding superior platforms, combat, C4I systems are enabled by a process that is rapidly becoming obsolete as we transition to net-centric operations and mission capability based acquisition. The current process does not take into account the complex business of combining multiple platforms for mission focus and does not adequately address the work and planning necessary to manage technical and programmatic System of Systems requirements. In his address, Carl Siel, ASN RDA Chief Systems Engineer, discusses the issues and offers changes needed to satisfy the additional requirements to field complex combinations of systems at the mission capability level.

### ABOUT THE SPEAKER:

*Carl R. Siel, Jr.* currently serves as the Chief Engineer for the Assistant Secretary of the Navy for Research, Development and Acquisition. He provides senior leadership for the integration and interoperability of combat, weapon, and command, control, communications and computers and intelligence systems across Navy and Marine Corps programs, and supports the Assistant Secretary in his responsibility for establishing policy and procedures to manage these activities consistent with Department of Defense directives. Mr. Siel was appointed to the Senior Executive Service in May 2004.

Upon receiving his undergraduate degree in Civil Engineering from the University of Dayton, Mr. Siel began his civil service career in 1980 as a structural project engineer employed with the David Taylor Naval Research Center in Rockville, Maryland. In 1985 Mr. Siel transferred to the SEAWOLF Class Submarine Program Management Office, Naval Sea Systems Command in Arlington, Virginia. Under this program, he worked in engineering and acquisition management positions and became responsible for the systems engineering, integration and evaluation of the SEAWOLF Hull, Mechanical, and Electrical Systems. After nearly nine years with the SEAWOLF acquisition program, he was selected as the Director of Advanced Submarine Concepts in 1994 and spent several years developing plans and leading research initiatives to advance the mission capabilities of existing and future submarine classes.

In 1997 Mr. Siel joined the Space and Naval Warfare Systems Command in San Diego, California where he spent over six years in a variety of engineering and acquisition management positions. In 1998 he was selected as the Deputy Program Manager for the Submarine Communications Program Office and led a multi-faceted communications program focused on enabling the submarine force to fully participate in network centric warfare operations. He was selected as the Program Manager for Navy Information Security Systems in 2000, where he directed the development, evaluation and fielding of information security systems across Navy ships and shore command sites worldwide. Post September 11, 2001 he was appointed by Commander, Space and Naval Warfare Systems Command to serve as the Command's Homeland Security Director and was given an Emergency Limited appointment to the Senior Executive Service. In this capacity he engaged in extensive assessments, evaluations and forums aimed at identifying opportunities to effectively deploy SPAWAR products and capabilities that addressed Homeland Security defense requirements for the Navy, as well as Federal, State and Local law enforcement, emergency service and intelligence agencies.

Mr. Siel is a graduate of the DoD Senior Executive Service APEX Orientation Program, Advanced Program Manager's Course, Defense Systems Management College, and a member of the Department of Defense Acquisition Professional Community. He has earned certifications in Program Management and in Systems Planning, Research and Development and Engineering. Mr. Siel is a recipient of the Department of the Navy Meritorious Civilian Service Medal.