More Efficient and Cost-Effective Procurement: Network-Centric Operations Industry Consortium (NCOIC)

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Until the end of the Cold War, government exercised the most clout in influencing many of the standards used in high-technology products. Today, the fast rate of change in commercial markets has increased their influence, and the world's governments tend to follow and support the standards established by industry. As a result, at the end of lengthy government acquisition processes, it is not unusual for the standards that federal agencies have imposed on their suppliers or system integrators to have been replaced. Therefore, improving federal agencies' awareness of future technology directions, through partnership with industry, would go a long way toward improving the efficiency and cost-effectiveness of procurement.

The NCOIC was established in 2004 for this purpose. The consortium's members, which include commercial companies such as Cisco Systems® and advisors from numerous government agencies, are combining their diverse talents and insights to advise governments around the world on the best standards to use for IT procurement. Not only is government far less likely to find itself with an obsolete technology, but network-centric operations provide a boost to governmental efficiency through greater interoperability across joint, interagency, intergovernmental, and multinational operations.

GETTING THE WORD OUT

One of the more visible ways that NCOIC works with government is through its Advisory Council, whose approximately 20 members are current and former high-level government officials charged with disseminating information about technology directions to their agencies and other colleagues. Not every agency can be represented on the council, so the NCOIC appoints people who have contacts with multiple agencies and are widely recognized for their operational and technical expertise. Current members include a former Undersecretary of Defense as well as high-ranking generals and admirals. Currently, the council is evaluating priorities for ten technology areas, which are listed at the end of this article.

The NCOIC also features a Technical Council comprising multiple teams of top-notch industry technology experts. They focus on assessing government agency requirements, identifying applicable open standards, developing collaborative engineering recommendations for use of selected standards, and disseminating information throughout civilian and defense agencies.

AN INVITATION

In the spring of 2006, NCOIC enacted one of its original provisions by opening membership to governments as well as industry partners. Any government agency can join. Collaboration between government and industry benefits everyone: Government can directly communicate its needs to the commercial sector, and the commercial sector can share technology directions with government. Government members do not have to be concerned about the appearance of favoritism because any private sector company is eligible to join the NCOIC.

MEASURING SUCCESS

Commercial members of the NCOIC are seeing the impact of their work. They anticipate receiving government requests for proposals for network-centric products and services that specify recommended NCOIC approaches and reflect the use of net-centricity tools developed by the NCOIC. Examples include the NCOIC Interoperability Framework; the NCOIC Systems, Capabilities, Operations, Programs, and Enterprises (SCOPE) Model for Interoperability Assessment; and the NCOIC Network-Centric Analysis Tool (NCAT). Some government

agencies have openly stated their intentions to incorporate these NCOIC tools into their acquisitions. When this practice becomes widespread, government procurement will have become far more efficient and cost-effective.

For information on joining the NCOIC, including a presentation on benefits of membership, visit: www.ncoic.org.

TEN HIGH-PRIORITY NET-CENTRIC ISSUES IDENTIFIED BY NCOIC AND ITS ADVISORS IN 2006 (*NOT* IN ORDER OF PRIORITY)

- Improved standards for waveforms and software-defined radios that allow more plug-and-play capability
- Improved standards for network management, extending to ships, aircraft, and weapons systems
- Improved network security standards that apply not only to network gear, but also to the weapons, radars, and radios they control
- A more complete understanding of how the convergence of voice, video, and data affects reliability and continuity of operations
- Improved quality-of-service standards
- Standards for security at the data level in addition to the server and transport level
- Improved understanding of the application of video-streaming standards in command centers
- Improved understanding of standards for multiple domain processing
- Modeling and simulation (M&S) frameworks and standards to promote interoperability among government and industry M&S centers
- Information and knowledge management

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