



Hot Topics in NCO Deployment Maturity

NDIA Net Centric Operations Conference
Waterside Marriott -- Norfolk, VA
March 13th, 2006

Moderator: C. Stephen Kuehl AIAA NCO PC Chairman





An Overview of AIAA



Mission

AIAA advances the state of aerospace science, engineering, and technological leadership.

Vision

AIAA is the shaping, dynamic force in aerospace – THE forum for innovation, excellence and global leadership.

-
- Non-profit under 501(c)(3) since 1963
 - World's Largest Professional Society in Aviation, Space, & Defense Engineering/Science
 - 31,000 members (5000 International) Across 7 Geographical Regions
 - 66 Technical Committees Spanning Aerospace Science & Technology
 - Aerospace Experts (Fellows – 706, Associate Fellows – 3562, Honorary Fellows – 79)
 - 30+ Yrs Experience in Delivering Objective Congressional Testimony on Aerospace Issues & Policy Guidance
 - Aerospace ISO Standards Body
 - Aerospace Professional Development Course Provider (Distance Learning)
 - Prestigious Aerospace Publisher – Books, Journals, & Technical Papers
 - Pre-College Educational Outreach (K-12)

NCO Society Focus



NCO Liaisons

Congressional

- ✓ Congressional Visits Day
- ✓ Congressional Position Papers

DoD, NASA, NIST, DISA, FAA, FCC

- ✓ Policy Changes
- ✓ Funding
- ✓ Technology Roadmaps

NSF, DARPA - Research Bodies

- ✓ Policy
- ✓ Funding
- ✓ Technology Roadmaps

NDIA, NCOIC, AFEL, INCOSE, W2COG

- ✓ Joint Conferences

COTS Trades Associations

- ✓ Standards
- ✓ Technology Roadmaps

NCO PC

Chairman

Steering
Committee (5)

IBSC
W/Deputy
Chairman
10-20
People

IBSC
Focused
Liaison

CBSC
W/Deputy
Chairman
10-20
People

CBSC
Focused
Liaison



AIAA Staff

- ✓ AIAA EXECUTIVE DIRECTOR
- ✓ Business Development/Marketing
- ✓ Public Policy
- ✓ Professional Development
- ✓ TAC/RSAC Support

AIAA Governing Body

- ✓ Board of Directors with Supporting Committees (Emerging Technologies)

AIAA TAC

- ✓ VP-TAC & PC Coordinator
- ✓ NIS + Seven Directorates
- ✓ 35+ Technical Committees
- ✓ Conference/Workshop Organizers

AIAA RSAC

- ✓ Local Sections
- ✓ US Regions
- ✓ International Regions

1st Tutorial Overview



■ DoD's NetCentric Data Strategy

Dan Risacher – OSD

The Department of Defense Net Centric Data Strategy provides a key enabler of the Department's Transformation, by establishing a foundation for managing the Department's data in a NetCentric environment. The tutorial will describe the implementation of this strategy and how it will make information visible, accessible, and understandable.

08:30 AM -- 9:30 AM

Break 9:30AM – 9:45 AM

9:45 AM – 10:45 AM

2nd Tutorial Overview



■ Mediate Cross Domain Information Flow: Enhanced Cross Domain Solution Decomposition

Jared Cohen - North Star Consulting Solutions (Enterprise IA Architecture & Systems Engineering Office)

This tutorial provides an overall architectural understanding of the Cross Domain Space (CDS) in the GIG. It describes the current Vision of CDS with respects to Mediate Cross Domain Information Flow while describing the architectural alternatives for future Increments. This architectural approach is implementation independent and assumes some process and/or core services will be available and deployed to support this approach. The tutorial recommends research and standards activities in this area for the entire development and integration community.

10:45 AM → 12:15 PM

3rd Tutorial Overview



■ Challenges and Recommendations in Building a Net-Centric System-of-Systems

James Smith – Carnegie Mellon SEI (AIAA NCO PC)

This tutorial will present current perspectives and recommendations on critical programmatic and technical challenges confronting organizations developing, acquiring, fielding, and sustaining a heterogeneous network-centric System of Systems comprising a mixture of COTS/GOTS/other reuse and developed systems. Topics include programmatic/organizational interoperability, cost and schedule estimation, system migration, and current technology limitations, enablers, and forecasts.

1:00 PM - 1:45 PM --- Intro/purpose/overview

1:45 PM - 2:00 PM ----"Traditional" systems

2:00 PM - 2:15 PM ---- Net-Centric motivation

BREAK 2:15 PM -- 2:30 PM

2:30 PM - 2:45 PM ---- Why is Net -Centric different?

2:45 PM - 3:15 PM ---- What to do about it?

3:15 PM - 3:45 PM ---- Technology issues

BREAK 3:45 PM -- 4:00 PM

4:00 PM - 4:15 PM Unresolved issues

4:15 PM - 4:30 PM Recommendations

4:30 PM - 5:00 PM Audience Discussion