



# NETWORK CENTRIC OPERATIONS INDUSTRY CONSORTIUM

*Founded in 2004, NCOIC is the world's recognized and sought-after thought leader, catalyst and partner for effective network centric operations and interoperability*



## NCOIC Overview



# Introducing NCOIC

- Non-profit consortium with international members and affiliates
- Vision: improve information sharing among different communities of interest to enhance their productivity, interactivity, safety and security
- 14-year legacy of addressing challenging global, cross-domain interoperability issues
- Keeps pace with changing concepts
- Promotes industry-neutral concepts for creating interoperability
- Develops open technical resources -- tools, processes, and frameworks for building interoperable systems across multiple marketplaces
- Provides expertise in interoperability planning, evaluation, testing and acquisition of products and services
- Serves public and private sectors



# The NCOIC Difference

- Unique characteristics set NCOIC apart
- Focus is on ***all aspects of cross-domain interoperability***, not just the technical foundation
- ***Track record*** of tackling global interoperability issues to improve information sharing and decision making
- ***Resources and services*** for building interoperable systems across markets, industries and national borders
- Members and advisors are ***global leaders*** who represent a range of industries and disciplines
- ***Open, legal and non-competitive environment*** where government and business can work together without conflict of interest

# Focus is on All Aspects of Interoperability

- NCOIC understands and addresses the technical foundation as well as regulatory, cultural, financial and other considerations
- Creating and maintaining a trusted and reliable interoperable environment is more than technical
  - Different cultures are often the biggest barrier to working together and can be the longest to change
  - Must meet business goals for consumer and provider
  - Must fit within laws and policies in order to receive global endorsements and acceptance and have a long life
- This unique implementation philosophy is reflected in NCOIC technical resources and services



**NCOIC QuadTrangle™**  
Cross-Domain Interoperability

# Solid Track Record



NCOIC has helped businesses and agencies improve their operations, including...

- **Federal Aviation Administration:** task order to help implement interoperability aspects of NextGen impacting enterprise architecture design
- **National Geospatial Intelligence Agency:** task order to integrate different cloud environments
  - Developed virtual infrastructure with unique policy rules
  - Second phase brought in emergency responders
  - Identified technology insertion points and made recommendations
- **NATO Communications and Information Agency:** contract with recommendations accepted by all nations and included in the acquisition cycle
  - Consolidated IT infrastructure, architecture and business case
  - Secured integrated cloud environment / policy for military, civilian users
- **NATO Allied Command Transformation:** cooperative engagement to develop interoperability verification for Federated Mission Networking environment
  - Evaluation and assessment reporting before acquisition and integration to reduce risk







# Tap in to NCOIC's Expertise

- **Contract directly** with the consortium for proven products and services that include interoperability roadmaps, acquisition strategies, tests, demonstrations and evaluations
- **Become a member**
  - *Organizations* can explore new ideas and capabilities in a neutral environment, accessing global technical leaders and experts interested in developing and testing interoperability approaches
    - Member companies and organizations designate a primary and alternate to be their official representatives to the consortium
    - Their other employees are welcome to participate in NCOIC activities
    - Includes senior executives, company founders, IT managers, technical specialists and business development leaders
  - *Individuals* are welcome to join the consortium
    - Subject matter experts and visionaries who want to be at the forefront of ideas, discussion and development of enabling interoperability in multiple marketplaces



# Technical Resources

- NCOIC has developed a proven toolkit for building interoperable systems across multiple marketplaces
- Valued at more than \$100 million and publically available for use
- Can result in lower costs, faster implementation, increased capability and reduced risk
- Helps developers explore customer needs, propose re-usable designs and test effectively
- Tools, processes, frameworks and other resources include
  - SCOPE® Model (Systems, Capabilities, Operations, Programs, Enterprises)
  - Network Centric Analysis Tool (NCAT®)
  - NCOIC Rapid Response Capability (NRRC™) Process
  - NCOIC Cybersecurity Policy and Standards Database

# Interoperability Services

- **Interoperability Verification** process designed for the acquisition cycle to evaluate and certify the interoperability of products and services offered to large and complex organizations
- **Online interoperability incubation and test environment** for demonstrating and proving technical concepts and solutions
- **Interoperability Roadmap** or implementation plan that includes both technical and non-technical considerations
- **Acquisition Strategy** that ensures systems being purchased can be successfully implemented, will have a long lifecycle and won't be dead-ended by technology, regulations or other factors
- Development, management and evaluation of **Requests for Proposals** for interoperable systems and products
- **Voice of Industry Reviews** that reflect comments by NCOIC members on a proposed solution, which can be pivotal to maintaining product neutrality
- **Training** and assistance with implementing and using NCOIC technical resources





# Diverse Membership

- Members collaborate across domains and nations to understand and address the corporate, industry, political and technical factors that affect interoperability
- Teams take on challenging issues and concepts as well as develop technical tools and processes
- Members, affiliates and senior advisors representing...
  - Academic institutions
  - Businesses -- Fortune 500 companies, manufacturers and service providers from a range of industries
  - Government agencies
  - Multi-national organizations
  - Non-governmental organizations





# International Advisory Council

- Senior government leaders, academicians and business executives with expertise in cross-domain interoperability
- Provide information and insight on interoperability issues, procurement trends and specific needs
- Council is unique for the breadth and depth of its membership
- Members represent the U.S., Canada, Europe, Australia and NATO
- Advisory Council leaders include
  - Chairman: **Gen. (Ret) Harald Kujat**, former Chief of Staff of the German Armed Forces and Chairman of the NATO Military Committee
  - Chair Emeritus: **Keith R. Hall**, 12<sup>th</sup> Director of the U.S. National Reconnaissance Office
  - Chair Emeritus: **Dr. Paul Kaminski**, former U.S. Undersecretary of Defense for Acquisition, Technology and Logistics



# Advisory Council Members

- **Maj. Gen. (Ret.) James D. (Dave) Bryan**, President and CEO, Bryan Business Management and Technology, **United States**
- **Dr. Steve Chan**, Chief Architect, Resiliency Project, U.S. Department of Defense, **United States**
- **Steven I. Cooper**, Strategic Information Concepts and Former Chief Information Officer, U.S. Department of Commerce, **United States**
- **Karen Evans**, National Director, U.S. Cyber Challenge, **United States**
- **Dr. Hamish Fraser**, Associate Professor of eHealth, Leeds Institute of Health Science, University of Leeds, **United Kingdom**
- **Dr. Julian M. Goldman**, Director of the Program on Medical Device Interoperability, Massachusetts General Hospital, Center for Integration of Medicine and Innovative Technology, **United States**
- **John Grimes**, Former Assistant Secretary of Defense for Networks and Information Integration and CIO, Department of Defense, **United States**
- **Christopher Rodrigues Macias**, Assistant Secretary of Enterprise Architecture, Department of Defence, **Australia**
- **Maj. Gen. (Ret.) Roosevelt (Ted) Mercer, Jr.**, Director of Interagency Planning Office, Next Generation Air Transportation System, Federal Aviation Administration, **United States**
- **Heath Naquin**, Executive Director, Office of the Vice President of Research, The University of Texas at Austin, **United States**
- **Kevin Scheid, General Manager**, NATO Communications and Information Agency, **Belgium**
- **Maj. Gen. (Ret.) Erich Staudacher**, General Manager, AFCEA Europe, **Belgium**
- **Jack Zavin**, Associate Director at U.S. Department of Defense, **United States**



# Board of Directors

- **Harry D. Raduege, Chief Executive Officer**  
Former Chairman, Deloitte Center for Cyber Innovation, Deloitte & Touche LLP
- **Chris Ahsmann**  
Vice President and Program Manager/P-8 Program, Boeing
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- **Dr. Douglas E. Rosendale, DO, FACOS, FACS**  
Chief Medical Interoperability Officer, Deloitte Consulting
- **James Soligan**  
Director, Deloitte Consulting LLP



# Open, Risk-Free Environment

- NCOIC is vendor-neutral and offers a legal, non-competitive working environment
- True dialog and collaboration between government and industry without compromising national or organizational interests
- Activities are based on open standards and commercial off-the-shelf products, with no proprietary technology or barriers to international participation
- Technical and business teams can discuss and develop technical tools and processes for use within different domains
- Participants can collaborate in a “laboratory-type” environment to develop comprehensive solutions to actual cross-domain interoperability problems, both organizational and technical



# Legal Status Vigorously Maintained

- NCOIC is compliant with the National Cooperative Production and Research Act (NCRPA)
  - Allows potential competitors to share information and ideas
  - Legal review four times a year
- NCOIC has a set of carefully crafted processes and procedures that meet the intent of the U.S. Office of Management and Budget (OMB) A119 federal regulation
  - Enables U.S. agencies to solicit industry comments on the development and use of standards
- Internationally trusted: Three (non-paid) contracts maintain legal stature with NATO
- Very few organizations are able to meet these conditions





# NCOIC's Value to Government

- Gain legal and rapid access to industry leaders and experts from different markets and nations
- Engage NCOIC for technical reviews that include Voice of Industry and academic perspectives
- Contract for interoperability projects, concept demonstrations and evaluations of the capability of products and services
- Learn specific strategies and actions to ensure that acquired systems will continue to be effective over the long term
- Participate on technical and operational teams to create new approaches and frameworks



NCOIC received the NCW Award from the Institute for Defense & Government Advancement for outstanding contributions to the development of NCO

# NCOIC's Value to Business

- Validate concepts and capabilities in a non-competitive environment
- Participate in demonstrations, evaluations, projects and technical teams
- Work with potential partners, suppliers and customers from a range of industries and disciplines
- Identify new market opportunities
- Provide meaningful input to government and insight across markets
- Exchange technical and business knowledge that enriches company talent



# NCOIC Does What Others Can't

- Robust legal environment for true collaboration and innovation
- Experience in implementing interoperable environments for greater communication, collaboration and awareness
- Proven technical resources such as processes, frameworks and tools
- Expert interoperability services that include demonstrating concepts, developing acquisition strategies and performing product evaluations
- Valuable expertise from leaders and innovators in a range of industries and disciplines





# Contact NCOIC

- Email us for a detailed presentation and discussion of your needs  
NCOIC@NCOIC.org
- Check out the NCOIC website and YouTube channel for more information
- Follow the consortium on Facebook, LinkedIn and Twitter



***With some of the brightest minds in the world  
contributing their insight, technology and domain expertise,  
NCOIC is well positioned to bring about  
profound change in the use of network technology***