Air and Space Interoperability Council

ASCC → ASIC: A Transformed Interoperability Organization

Wing Commander Rod Dawson, RAAF
Management Committee
Mission & Vision

- ASIC precedes NATO
  - US: 1948 (USN: 1951)
  - UK: 1948
  - CA: 1948
  - AU: 1964
  - NZ: 1965
  - US Army: 200X?

- Mission:
  - ‘To enhance current and future Air and Space warfighting capabilities through joint and coalition interoperability’

- Vision:
  - ‘Allies striving towards fully interoperable and integrated Air and Space forces’
Standardization Products
- A Strong Legacy

- Aviation Fuels, Lubricants, Associated Products and Gases
- Air Armament
- Aerospace Engineering, Maintenance and Logistics
- Air Transport Systems
- Air Operations and Doctrine
- Aerospace Medicine, Life Support and Aircrew Systems
- Mission Avionics
- Intelligence, Surveillance and Reconnaissance
- NBC Defensive Measures
- Aeronautical Information Airfield Facilities and Air Traffic Services

Enhancing coalition warfighting capability through air and space interoperability
Key Issues
- Precipitating Transformation

- Staffing Issues
- Productivity:
  - 103 Active Projects (One completed in 2 years!)
  - 350 published Standards
  - Balance current versus future interoperability
    (need to be more forward looking)
- Broader interoperability issues – versus Standardization
  - Bottom-Up driven
- Not focused on Expeditionary Warfare
- Performance Measures:
  - Increased coalition efficiency and effectiveness?
  - ASIC effectiveness?
  - Business case for additional ASIC resources
Capstone Concept

- Foundation document which provides strategic direction
  - What has changed …
    - Strategic Environment, ASIC Interoperability Priorities
  - Where ASIC is going …
    - Values, Vision, Mission, Key Attributes
- How …
  - Interoperability Framework
    - Whole of warfighting
    - Whole of capability
    - Scenario based
    - Measures of Interoperability (Metric based)
Enhancing coalition warfighting capability through air and space interoperability

**Functional Concepts: (Whole of Warfighting)**

- Agreed set of effects based warfighting functions:
  - Agile Combat Support
  - Air Mobility
  - Command & Control
  - Intelligence, Surveillance, Target Acquisition and Reconnaissance
  - Force Application
  - Force Protection

- Definitions and descriptions are developed in an interoperability context *(not doctrinally pure)*:
  - Describes desired levels of interoperability so that work can be properly focused
  - Lists roles/tasks
Capability Elements: (Whole of Capability)

- Agreed set of terms to ensure that ASIC takes a ‘whole of capability’ approach to considering interoperability issues

- Adaptation of the:
  - US - DOTMLPF
  - AU – Fundamental Inputs to Capability
  - CA – PRICIE (Functional Development Portfolio)
  - UK – Lines of Development
Must balance current, evolving and future force interoperability

- Force-in-Being
  - Lessons Learnt
  - Operational Imperatives
  - Exercises

- Future Force
  - Future concepts and architectures
  - Experimentation (People/Organization/Doctrine and Technology)
  - CTDs/TDPs

**COALITION WARFIGHTING CAPABILITY OVER TIME**

- INFORM NATIONAL CAPABILITY DEVELOPMENT PLANS
Enhancing coalition warfighting capability through air and space interoperability

FOUNDATION OF INTEROPERABILITY

Shared Vision
Trust and Understanding
Collaboration
Commitment

ASIC - VISION

‘Allies striving towards fully interoperable and integrated Air and Space forces’

Warfighting Concepts
Information Exchange
Real World Ops Lessons Learnt
Experimentation
Standards and Publications

Capability Elements
Interoperability Framework

- Maps Functional Concepts and Capability Elements against desired levels of interoperability
- Major purpose is to facilitate validation of existing and future projects, activities, documents, Information Exchanges, Liaisons
- Identify activities / tasks that no longer meet strategic guidance and / or identifying gaps where ASIC needs to commence work / liaison
ASIC Working Groups can be aligned to framework where emphasis is agreed and priorities and resources assigned.
**Interoperability Survey**

Survey designed to identify the most important interoperability shortfalls within a given scenario:
- Humanitarian Relief Operations (HUMRO)
- Non-combat Evacuation Operations (NEO)
- Peace Support Operations (PSO)
- Global War on Terrorism, and (GWOT)
- Major Combat Operations (MCO)

Derivative of USAF Capabilities Review & Risk Assessment (CRRA) Capability Planning Process

- **Must be structured, repeatable and analytically sound**
  - Apply analytic principals to question selection and weighting process
  - Not a capabilities gap analysis, but interoperability gap analysis
Enhancing coalition warfighting capability through air and space interoperability

Survey Methodology

- **Operational Context**: Humanitarian Relief Operation (HUMRO)
  - Scenario: Tsunami Disaster Relief
  - Focus Areas: Deployable & interoperable C3, Air Transport, Aeromed. Evac. (AE)

- **Approach** focuses the survey by determining the *activities* that make the greatest *contribution* to the *functional concepts* that have the greatest *impact* on the success of the **HUMRO mission**

- Questions on importance, level, impact, obstacles and future of interoperability
Enhancing coalition warfighting capability through air and space interoperability

**FUNCTIONAL CONCEPTS**

**CAPABILITY ELEMENTS**

- Force-In-Being
- Evolving Force
- Future Force

**Survey Process**

- Capability based
- Coalition Architectures
- Measures of Interoperability Gaps and Shortfalls

**National Perspective**

- Subject Matter Experts
- Lessons Learnt
- Interoperability Assessments
- National Architectures
- National Force structure

**STANDARDS/PUBLICATIONS**

**COLLABORATIVE OPPORTUNITIES**

**MEASURES OF INTEROPERABILITY**

- Effectiveness
- Performance
- Suitability
- Economy

**REAL-WORLD OPERATIONS**

**EXERCISES**

**EXPERIMENTATION**

**FEEDBACK LOOP**
QUESTIONS?

www.airstandards.com