Defense Critical Infrastructure Program

NDIA
National Small Business Conference
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Office of the Assistant Secretary of Defense for
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“Possibly the single most transforming thing in our forces will not be a weapons system, but a set of interconnections and a substantially enhanced capability because of that awareness.”

Secretary of Defense
Donald Rumsfeld
August 9, 2001
HOMELAND SECURITY (HLS): A concerted national effort to prevent terrorist attacks within the U.S., reduce America’s vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. *(from National Strategy for Homeland Security, The White House, 16 July 2002)*

HOMELAND DEFENSE (HD): The protection of U.S. sovereignty, territory, domestic population, and *critical defense infrastructure* against external threats and aggression. *(DoD Directive 5111.13, draft)*
Mission:
Enhance Risk Management Decisions At All Levels To Ensure That Defense Critical Infrastructure Is Available When Required

Vision:
Assurance of Defense Mission Critical Infrastructure in an All Hazards Environment

Goals:
- Policy and Program Guidance
- Strategic Partnerships & Enabling Technologies
- Plans, Programs and Capabilities Integrated and Implemented At All Levels
- Resourcing At All Levels
- Education and Outreach
DoD CIP Organizational Framework

DEFENSE SECTORS, LEAD AGENCIES & PRINCIPAL STAFF ASSISTANTS

- Transportation
- Public Works
- Logistics
- DIB
- Financial Services
- Health Affairs
- Personnel
- GIG/C2
- ISR
- Space

US TRANSCOM

USD(AT&L)

USD(C)

USD(P&R)

USD(I)

ASD(HA)

DFAS

DLA

USACE

DCMA

ASD(NII)

DISA

DHRA

USSTRATCOM

ASD(ISP)

Secretary of Defense

USD(Policy)

ASD(HD&ASA)

Director, CIP

CIP Oversight & Resource Advocate

SOFTWARE DEPARTMENT

MILITARY DEPARTMENTS

- Operations Advisory Board (OAB)

JOIN STAFF

SERVICES/NGB

Army USMC Navy USAF NGB

USCG

COMBATANT COMMANDS

CENTCOM EUCOM JFCOM NORTHCOM PACOM SOCOM SOUTHCOM STRATCOM TRANSCOM

Governance Council

Critical Infrastructure Protection Integration Staff (CIPIS)

Defense Infrastructure Sector Council (DISC)

Defense Agencies

Defense Field Activities
Defense Critical Infrastructure Program
Core Activities

Risk Assessment:
- Criticality
- Vulnerability
- Threats & Hazards

Risk Management:
- Remediation
- Mitigation
- Reconstitution

DCIP
"LEAD"

DCIP
"SUPPORT" "ENABLE"

Risk Assessment: A systematic examination of risk, using disciplined processes, methods, and tools. It provides an environment for decision making to continuously evaluate and prioritize risks and recommend strategies to remediate or mitigate those risks. (from DoDD 3020.40)

Risk Management: A process by which decision makers accept, reduce, or offset risk. (from DoDD 3020.40)
• Enhance the protection of our Nation’s critical infrastructure and key resources against terrorist attacks
• Identify, prioritize and coordinate the protection of critical infrastructure and key resources in order to prevent, deter and mitigate the effects of deliberate efforts to destroy, incapacitate or exploit them.
• Work closely with State and local governments and the private sector.

**NATIONAL CI/KR SECTORS**

**Department of Agriculture**
- Agriculture, food (meat, poultry, egg products)

**Department of Health and Human Services**
- Public Health and healthcare
- Food (other than meat, poultry, egg products)

**Environmental Protection Agency**
- Drinking water and wastewater treatment systems

**Department of Energy**
- Energy, including the production, refining, storage, and distribution of oil and gas, and electric power (except for commercial nuclear power facilities)

**Department of the Treasury**
- Banking and Finance

**Department of the Interior**
- National monuments and icons

**Department of Defense**
- Defense Industrial Base

**Department of Homeland Security**
- Chemical
- Commercial facilities
- Dams
- Emergency services
- Commercial nuclear reactors, materials, and waste
- Information Technology
- Telecommunications
- Postal and shipping
- Transportation systems
- Government facilities
The Defense Industrial Base (DIB) is the DoD, government, and private-sector worldwide industrial complex with capabilities to perform research and development, design, produce, and maintain military weapon systems, subsystems, components, or parts to meet military requirements.

Because the DIB is inherent to and integrated with the infrastructure vital to the DoD execution of the National Military Strategy, the Defense Critical Infrastructure Program (DCIP) includes DoD efforts to identify, prioritize and coordinate the protection of critical DIB assets.
The Indian Incentive Program (IIP) is a congressionally sponsored program that provides a 5 percent rebate, on the total amount subcontracted to an Indian-Owned Economic Enterprise or Indian Organization, back to the prime contractor in accordance with DFARS Clause 252.226-7001. Through the generation of subcontracts to the above mentioned entities, the IIP fulfills its purpose as an economic multiplier for Native American communities. DoD prime contractors, regardless of size of contract, that contain the above referenced clause(s) are eligible for incentive payments. [www.acq.osd.mil/osbp/programs/iip/index.htm](http://www.acq.osd.mil/osbp/programs/iip/index.htm)

Note: DoD prime contractors with a contract of $500,000.00 or more, that contain the above referenced clause(s), are eligible for incentive payments.
The DoD Women-Owned Small Business (WOSB) Program highlights the DoD efforts to achieve the 5 percent goal for prime and subcontract awards to small business concerns owned and controlled by women.

The program objectives are:

- To facilitate, preserve, and strengthen full participation for WOSB concerns in the DoD acquisition programs for goods and services.
- Through programs and activities, including outreach and technical assistance, support the growth of women-owned small business concerns.

The DoD Comprehensive Subcontracting Plan Test Program authorizes the negotiation, administration, and reporting of subcontracting plans on a plant, division, or company-wide basis as appropriate. The purpose of the test is to determine whether comprehensive subcontracting plans will result in increased subcontracting opportunities for Small Business while reducing the administrative burdens on contractors.
The DoD Regional Councils for Small Business Education and Advocacy are a nationwide network of small business specialists organized to promote the National Small Business Programs of the United States. 


The DoD has undertaken an aggressive outreach effort to identify small business concerns that are owned and controlled by veterans and service-disabled veterans. The purpose of the DoD outreach effort is to improve prime and subcontracting opportunities for veteran and service-disabled veteran-owned small business concerns.


The HUBZone Empowerment Contracting Program stimulates economic development and creates jobs in urban and rural communities by providing Federal contracting preferences to small businesses. These preferences go to small businesses that obtain HUBZone (Historically Underutilized Business Zone) certification in part by employing staff who live in a HUBZone. http://www.sba.gov/hubzone/
The Department of Defense has entered into agreements with Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs), and other minority institutions of higher education.
Small businesses play a critical role within the defense supplier base—prime and subcontract dollars are increasing.
Increasing RDT&E appropriations have driven strong SBIR and STTR budget growth.
TOPIC TECHNOLOGY AREAS:
Focus of SBIR Investments

CONCENTRATION OF EFFORT

Source: SBIR & STTR solicitations, FY02-FY06
Knowledge Display & Aggregation System (KDAS)

DCIP Infrastructure Resilience Knowledge System

The Infrastructure Resilience Knowledge System is a tool set to provide capabilities that support DoD’s Defense Critical Infrastructure Program (DCIP) missions and objectives of ensuring the availability of critical networked assets through the identification and assessment of resources essential for executing the national military strategy. This integrated, comprehensive system consists of an intuitive GIS-based graphic user interface (GUI) and toolset that allows for the collection, integration, analysis, visualization, and output of disparate data related to defense critical infrastructure worldwide. These tools provide a means to assess the status as well as the adequacy of resources in the event of a loss or degradation of critical infrastructure elements through identification and prioritization of critical infrastructures, impact assessment on the military industrial complex, assessment of infrastructure interdependencies, resource location and allocation analysis, and facilitation of critical decision making. The system is also useful for efficiently disseminating information gleaned from the analysis results via digital and hardcopy maps, consequence analysis reports, and database visualizations, related to vulnerability, threat assessments, warnings, and mitigation options.

In addition to providing critical information at the time of a loss or degradation, this GIS application can also be used for pre-event planning to formulate mitigation, preparedness, and possible recovery scenario priorities through analysis of existing and real-time data.
Various methods of data acquisition

- **Government**
  - Direct data exchanges/partnerships
    - NGA, USGS, IVT, DISDI
  - Omnibus federal use license (NGA)
    - NAVTEQ, PLATTS, TGS, IONICS/MCH, Dunn & Bradstreet

- **Commercial/Industry**
  - Purchase existing data sets
    - Telcordia
  - MOU’s/ Non-disclosure agreements
  - Contract to build new data sets

- **Coordination activities**
  - HIFLD – Homeland Infrastructure Foundation Level Database
    - Federal, state and local government participation
    - Commercial/Industry participation
  - DISDI – Defense Installation Spatial Data Infrastructure
    - Standardize installation data for all services
  - HSIP – Homeland Security Infrastructure Program
    - Joint effort with USGS and NGA
  - NADB-National Asset Database Working Group
Data Verification, Management, and Analysis

Data Review and Verification

- Data alone does not produce a quality DCIP product. It needs evaluation for quality/accuracy.
- Infrastructure experts integrate and evaluate multiple data sources using various tools to produce DCIP products.
  - Criticality
  - Dependencies
  - Single Points of Failure

Data Management and Organization

ArcCatalog

DCIP

DMS

ArcMap

ArcScene

ArcToolbox

ArcCatalog

Commercial Software Tools

Telecommunications

Electric Power

Road & Rail

Petroleum

Natural Gas

Water

Custom Software Tools

Data Sources

Management

Analysis & Review

ArcSDE

Advanced Spatial Data Server
Why HIFLD Started

- Needed to fuse, analyze and visualize information – everything has a location
- Maps for decision makers were wrong
- PowerPoint Clip Art was default map of U.S.
- Needed a common geospatial foundation for multiple Homeland Defense/Homeland Security (HD/HLS) uses
- Needed partnerships to accomplish
Collaborate with DoD, the Inter-Agency and its partners to promote domestic infrastructure geospatial information

- Gathering
- Sharing
- Protection
- Visualization
- Knowledge management
MUST be a Federal government member or be sponsored by one

Access can be requested via non-passworded website (http://hifldwg.org)
  “How to Join” link at top of page
  Web-based access request template
  If not a Federal government member, you will be prompted to provide contact info for your Federal government sponsor

HIFLD Website Content:
  Information and on-line registration for upcoming WG meetings
  Agendas, attendee lists, briefings, and minutes from previous meetings
  Searchable library of HIFLD and homeland infrastructure-related documents
  Roster and contact info for all HIFLD WG members
  Federal geospatial data guidance
  On-line HSIP Gold data request form

Visit the HIFLD Website

HSIP Gold Available for Distribution
NGA has compiled their first annual HSIP Gold data release, which is now available for distribution.* You may request a copy of the HSIP Gold Data by submitting the following on-line data request form:

HSIP Gold Data Request Form
*For more information on HSIP Gold, what it contains, and its format, please download the HSIP GOLD Production Status Brief, which was presented at the June 05 HIFLD session.

Meeting Follow Up
The last HIFLD Working Group meeting was held on 18-19 October in Dahlgren, VA. The focus sector for this meeting was Postal & Shipping Sectors and Defense Logistics. Meeting minutes will be posted soon.

• Agenda (Word) • Attendee List (Excel)
• Briefings

Date added: 10-20-2005

Welcome Jeffrey C. Wiser!
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