



# **Installation Geospatial Information and Services (IGI&S) - Update on Policy, Standards, Issues**

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# Agenda

Acquisition, Technology and Logistics

- What does the Defense Installations Spatial Data Infrastructure (DISDI) Program Do?
- Overview of new IGI&S Policy, DoDI 8130.01
  - Authoritative Data Source (ADS) Requirement
  - Common Installation Picture
- Accomplishments and Future Milestones for the IGI&S Governance Group (IGG)
- Useful Links and POCs



# What Does the DISDI Program Do?

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- Policy, Guidance, and Oversight
  - Geospatial input to the Business Enterprise Architecture (BEA)
  - IGI&S policy (new)
  - IGI&S standards governance
  - IGI&S investment and systems governance
  - “Thought leadership” on use of geospatial technology for EI&E missions
- Direct Support
  - Maintain a DoD-wide GIS database containing the “Common Installation Picture”
  - Make data visible
  - Make data accessible
  - Make maps upon request
  - Perform spatial analysis upon request
  - Provide tailored support to EI&E functions upon request

The DISDI PM is the GIO for the ASD Energy, Installations, and Environment portfolio



# DoDI 8130.01, *Installation Geospatial Information and Services (IGI&S)*

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- DoDI 8130.01 was signed April 9, 2015
  - Closes the policy gap created by rapid advance of GIS technology into the installation management mission area, a use not addressed by NGA or other DoD policies
- Highlights:
  - Components must start implementing the requirement to compile IGI&S data into an authoritative data source for each installation
  - Army is officially tasked to manage the technical development of SDSFIE
  - “DISDI Group” becomes “IGG”
  - DISDI PM becomes the EI&E Geospatial Information Officer (GIO)
  - Common Installation Picture (CIP) is an official data requirement



# The Value of IGI&S: Managing and Maintaining Essential Data

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- Installation Master Plan
- INRMP  
(Integrated Natural Resource Management Plan)
- E-9-1-1 CAD  
(Computer Aided Dispatch)
- AICUZ  
(Air Installation Compatible Use Zone plan)
- NEPA Studies  
(National Environmental Policy Act)
- DERP Documents  
(Defense Environmental Restoration Program)
- JLUS  
(Joint Land Use Study)
- ESS Plans  
(Explosives Safety Siting)

The IGI&S Programs exist to make the GIS data from these projects:

- Visible
- Accessible
- Understandable
- Trusted
- Interoperable

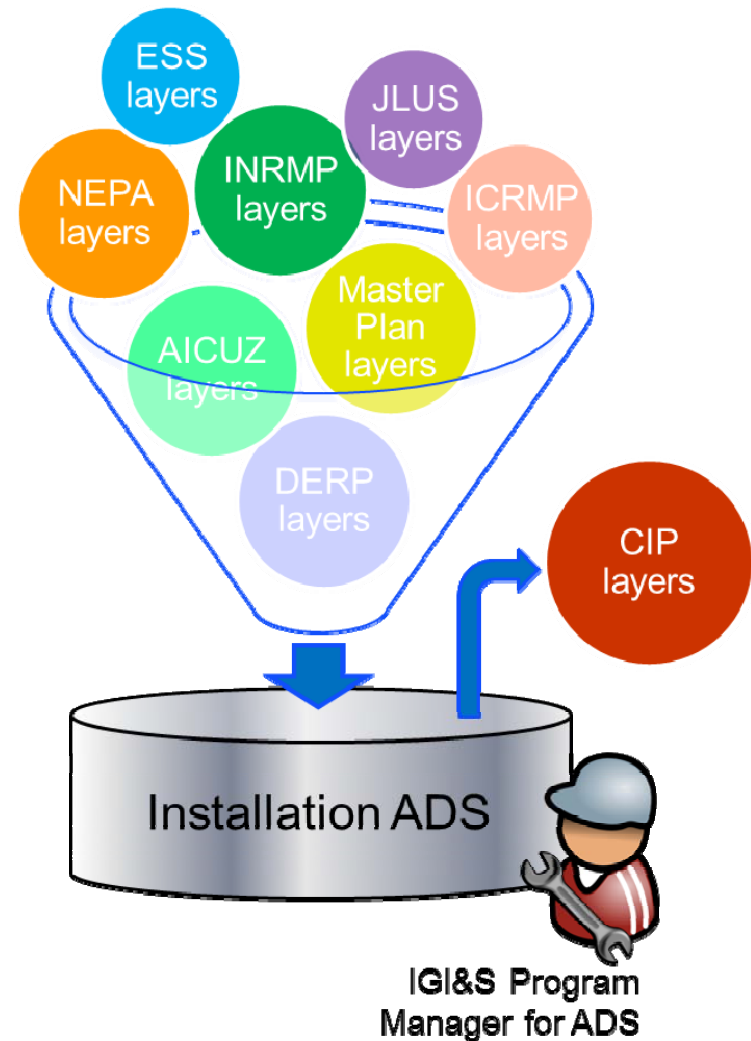


# IGI&S: Many Data Sources, One Governance

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- What it takes to meet the ADS requirement:
  - ✓ – Data standards
  - ✓ – Data collection guidance
  - ✓ – Data sharing tools
  - ✓ – IGI&S expertise
  - ? – Data stewards/proponents
  - ? – Contract language/specs
  - ✗ – ADS authority designation
  - ✗ – ADS management process

**Airborne Imagery (orthophoto) is essential to most/all ADS data – include it**





# Common Installation Picture (CIP)

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- There is only one “CIP”
- Components may develop similar data sets
  - “Army CIP”
  - “Navy CIP”
  - “GeoBase CIP”
  - etc
- The IGG is responsible for developing the CIP layer list & any implementing guidance annually
- Annual CIP Cycle:
  - **Summer:** IGG develops next CIP layer list
  - **Fall:** ASD(EI&E) issues CIP data call
  - **Winter:** Components submit CIP data
  - **Winter/Spring:** DISDI reviews & conflates CIP data into master data set



# 2015 CIP Request (SDSFIE 3.1 format)

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- 8 Sep 15: List of Common Installation Picture (CIP) layers developed by the IGG, approved by ASD(EI&E)
- 16 Sep 15: Formal request issued by BSI, OASD(EI&E) in similar fashion to a Real Property Inventory request
  - 90 day suspense (due 30 Dec 15)
- Submission guidelines:
  - SDSFIE-V 3.0 or 3.1 compliant
  - Include sub-classed feature types that correspond to requested layers
  - Include metadata at Component HQ level, per layer

*Each CIP layer is justified by 3-7 different DoD policies; most are required by 5 policies*

3.1 Layer Name
AccessControl
AirAccidentZone
Bridge
Building
Environmental RemediationSite
ExternalPropertyInterest
Fence
FutureProjects
GolfCourse
HistoricDistrict
ImpactArea
Installation
LandParcel
LandUse
MilitaryRange
MilitaryTrainingLocation
MilQuantityDistanceCombinedArc
NatResAcquisitionBoundary
NoiseZone
Outgrant
PavementBranch
PavementSection
RailSegment
RailTrack
RecreationArea
RoadPath
RoadSeg
Site
Tower
VehicleParking
Wetland

**New for 2015**





# IGG Accomplishments, 2008-2016

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## Policy & Guidance

- ✓ DoDI 8130.01, IGI&S
- ✓ SDSFIE Governance Plan
- ✓ Change Management Plan (SDSFIE)
- ✓ SDSFIE-V Implementation Guidance
- ✓ SDSFIE-M Implementation Guidance

## IGI&S Standards

- SDSFIE 3.0 (vector)
- SDSFIE 3.1 (vector)
- SDSFIE-M 1.0.2
- SDSFIE-M Implementation Spec (SMIS)
- SDSFIE-V 4.0



# IGG “To Do” List

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- SDSFIE-R
- SDSFIE-Q
  - Main document
  - DCS General Guidance
  - DCS for each CIP layer
- SDSFIE-M v 2.0 and implementation
- Implementation of SDSFIE-V v 4.0
- SDSFIE Governance Plan – update
- ADS Implementation Guidance






# The New DISDI Portal

Home IGI&S Programs DoD Links Federal Links Standards Resources FAQs Contact Us


**DISDI Atlas**

ACCESS RESTRICTED; UNDER DEVELOPMENT - This global web map provides detailed views of all DoD installations and operating areas along with useful National-scale layers (e.g., Congressional Districts, infrastructure, environmental data) and up-to-date imagery. Use it to create your own "operating picture" of Defense installations.

**Data / Metadata Search**


Search for geospatial data and metadata from across the IGI&S community.

\*\* Search Coming Soon \*\*


**DISDI Atlas Pro (Map Viewer)**

With customizable data views, more extensive tools and querying capabilities, this global map viewer of DoD installations is designed for the more advanced user.


[DISDI Map Viewer User Guide](#)  
[DISDI Portal Factsheet](#)

**Policy & Documents**

Find and download DoD policy, guidance, presentations and other documents applicable to the IGI&S community.

**Map Library**

Browse our collection of ready-to-use IGI&S maps. This library includes maps of DoD installations organized by State, Territory and COCOM.

**Data / Custom Map Request**

Contact the DISDI Program to (a) request authoritative geospatial data, (b) gain access to secure web map services (WMS), or (c) request customized map products.

**News**

- 02-03-2016 - Welcome to DISDI Portal!
- 03-25-2016 - SECDEF Map Request
- 03-25-2016 - Data Quality Standard
- 02-08-2016 - Alaska Mapping
- 02-08-2016 - AT&L Spatial Data Support

**Updates**

- 03-03-2016 - Renaming of DISDI Portal 2.7

<http://disdiportal.osd.mil/>



## Useful Links

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- DoDI 8130.01, Installation Geospatial Information and Services
- <http://disdiportal.osd.mil> (CAC protected, links to the Components' IGI&S Program web pages are here)
- <http://maps.osd.mil> (CAC protected, interactive global map of DoD installations, etc.)
- <http://sdsfieonline.org> (public (registration required) location of IGI&S data standards and related documents)



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**Questions?**



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**BACK UP SLIDES**



# DoDI 8130.01 – Key Responsibilities

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- Secretaries of the Military Departments (in addition to Component responsibilities):
  - Designate Service IGI&S elements to coordinate IGI&S capabilities
  - For each installation, establish a trusted, authoritative data source (ADS) for all geospatial data and products which fulfill installation and environment missions
    - Includes common installation picture (CIP) data
    - Includes data or products from INRMPs, master plans, MMRP maps, Explosive Safety Site plans, AICUZ studies, Joint Land Use Studies, etc.
    - Provide mechanisms for this data to be made visible, accessible, understandable, trusted, and interoperable throughout the data lifecycle at the headquarters level as well as across the federal data sharing environment, to include the Geospatial Platform
  - Provide for the creation and maintenance of geospatial data describing:
    - The CIP as defined by the IGG and approved by ASD(EI&E)
    - Location and extent of all DoD real property assets
    - Location and extent of DoD infrastructure
    - Location of natural and cultural resources, environmental, safety, and installation master planning information
  - Ensure IGI&S requirements are coordinated with their respective GI&S officers and DROs, per CJCSI 3901.01D



# What is SDSFIE?

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- The Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) *are now a family of IT standards for geospatial information and services supporting installation, environment, and civil works missions.*
- The SDSFIE family consists of 7 parts:
  - Vector, Raster, Metadata, Quality, Services, Portrayal, Endorsed
  - Metadata and Quality standards support auditability and accuracy
  - A logical extension of existing IGI&S standards
- SDSFIE Online: a web-centric interface that enables users to access documentation, participate in functionality and utilize tools that support the goals of the SDSFIE family of standards.

***SDSFIE is a “dictionary” for interoperability, NOT a set of data collection requirements***





## SDSFIE-V 4.0

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- 2014-2015: gathered SME input across all EI&E functional areas, including training range domain
- Final 4.0 model is done; IGG voted to adopt on 22 Apr
- Mandate for implementation is expected Q1/FY2017
  - Triggers a 9 month deadline to prepare implementation plans
  - Implementation will thus not likely begin until late FY2017
- Known gaps: test range and some airspace requirements, “white space” data



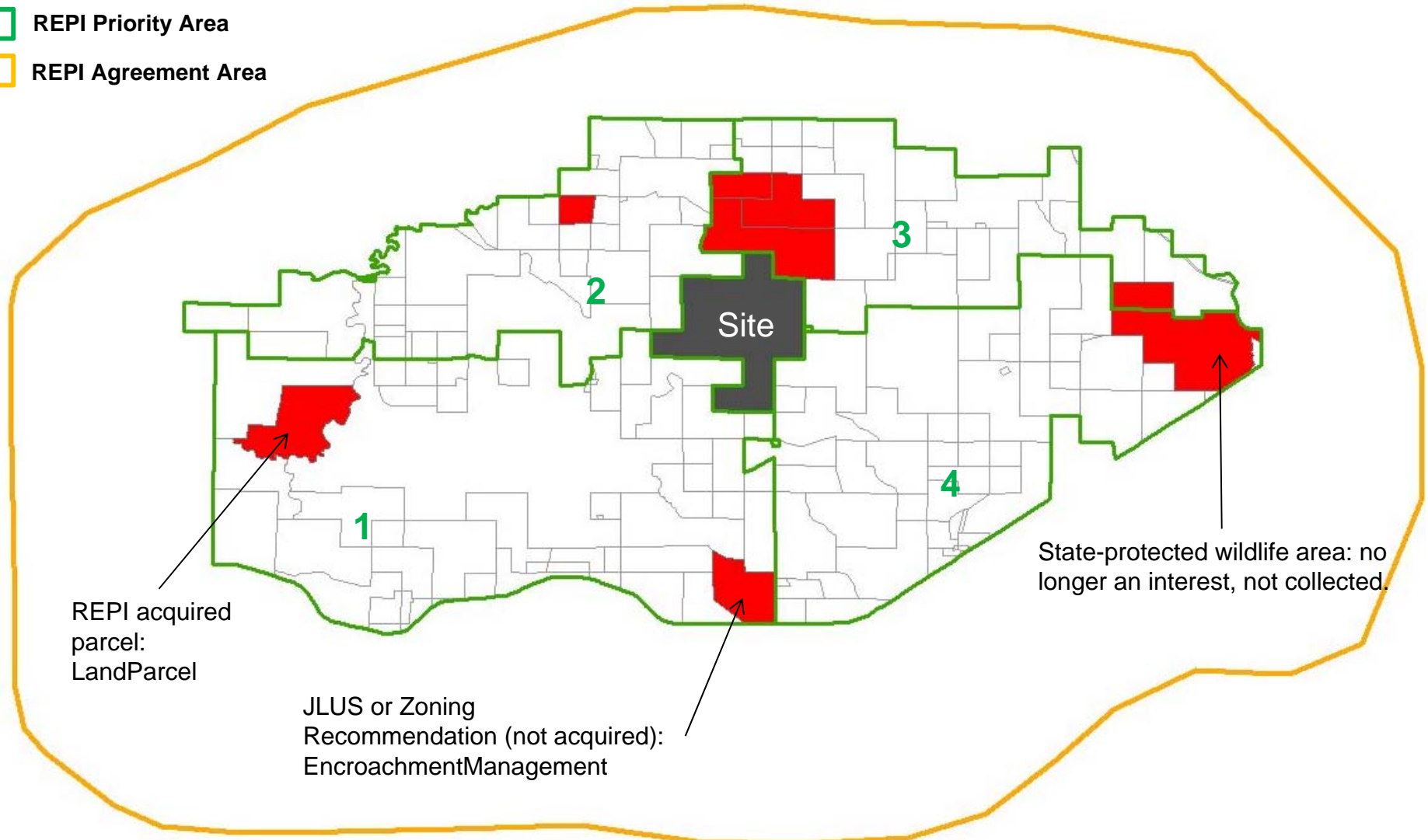
# SDSFIE 4.0 Encroachment Management Feature Types

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**Encroachment Management:** All parcels within the REPI Agreement Area could potentially be included in this layer.

**REPI Priority Area**

**REPI Agreement Area**





# SDSFIE v. 4.0 Encroachment Management Feature Type Definitions

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## New Feature Types

### Encroachment Management

**Definition:** A location, typically parcels outside the installation, where the DoD Component or eligible entity plans to or takes an encroachment management action.  
**Description:** In the REPI Buffer Partnership Guide, encroachment management areas are referred to as parcels.

### REPI Priority Area

**Definition:** The defined area (s) within a project's area of interest that contains the installation's highest priority parcels or geography, as determined by the installation's and Component's planning processes.  
**Description:** A project may have multiple priority areas numbered or differentiated by order of priority or importance.

### REPI Agreement Area

**Definition:** The total geographic area in which an installation and its partners are authorized to execute pursuant to a cooperative agreement, encroachment protection agreement, or other real property agreement.  
**Description:** In the REPI Buffer Partnership Guide, encroachment agreement areas are called areas of interest.

### Encroachment Management Attributes

#### SDSFIE Standard Attributes

**management ActionStatus** The completion status of the management action for the target parcel or land area.

**management ActionType** The type of management action intended to be implemented at the target parcel or land area.

**isRepiReportable** A yes or no indicator whether the property interest has been or will be reported to the Readiness and Environmental Protection Integration (REPI) program

**priority** The priority number assigned to the encroachment agreement area in which the property interest is located.

**projectID** The unique number assigned to the encroachment management project.

**parcelID** The unique number assigned to each parcel within an encroachment management project.

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