



FGDC Coordination Group
January 11, 2011

FGDC Standards Program Advancement

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Overview of Presentations

Three-part standards presentation

1. FGDC Standards WG update and standards process overview
 - Current FGDC standards and WG activities
 - FGDC Standards processes overview
 - FGDC endorsement of external standards
 - Aligning FGDC and GWG standards activities
2. Geospatial Intelligence Standards Working Group (GWG)
 - Overview
 - Standards Process
 - Current FGDC/GWG interaction
3. FGDC actions and next steps to integrate FGDC and GWG standards activities
 - Benefits
 - General process
 - Dependencies for success
 - Determine a plan for implementation



Purpose

- ◆ Provide current FGDC standards activities/WG status
- ◆ Provide a common high-level understanding of the existing FGDC and GWG standards bodies and processes
- ◆ Present the value, issues, and resolutions for integrating the FGDC and GWG standards processes
- ◆ Outline the requirements/responsibilities that will make an integrated effort successful
- ◆ Get initial CG concurrence on the effort and approach
- ◆ To identify a CG task team for a ½ day meeting to review possible solution tracks, identify/resolve issues
 - Prepare a recommendation for CG and SC endorsement
- ◆ Allow some initial discussion



The FGDC/GWG* Stage

- ◆ Civil, Defense, Intelligence domains have overlapping geospatial business requirements under the Federal umbrella
- ◆ Geospatial standards require multiple: reviews, processes, standards bodies; with duplicative/overlapping membership
- ◆ Playing field is changing:
 - Geospatial Platform is establishing a common operational environment (ex: GV-ES) to meet cross-domain requirements
 - FGDC endorsed 64 standards (NGA/FGDC member request)
 - FGDC 2010 survey – “more oversight of FGDC standards development”
- ◆ Budgets and participation are thinning, limited subject matter expertise resources
- ◆ Domains are out-of-sync on geospatial standards
- ◆ FGDC OS and GWG leadership have been evaluating integrating the FGDC and GWG geospatial technology standards review and endorsement processes to pose a solution



* Geospatial Intelligence Standards Working Group (GWG)

Basics

- ◆ FGDC Standards Working Group (SWG)
 - Focus: Civil domain and geospatial content standards
 - Federal agency members working with a “standards lead agency” to advance a standard through its development
 - Steering Committee provides final endorsement
 - FGDC has a policy/process to endorse externally developed standards
 - FGDC is a voting member of the GWG

- ◆ Geospatial Intelligence Standards Working Group (GWG)
 - Focus: Defense and Intelligence domain geospatial technology standards
 - Focus Groups develop/review standards
 - DoD IT Standards Committee (ITSC) and Intelligence Community Enterprise Standards Committee (IC ESC) provides final endorsement
 - Adopted standards are cited in the DoD IT Standards Registry (DISR) and the IC Standards Registry (ICSR) and use is enforced on agencies/contractors through contract approval process
 - NGA, DOE, DHS are members of the FGDC CG and Steering Committee





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January 11, 2011

FGDC Standards WG (SWG) Update

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Topics

- ◆ Status of FGDC standards projects
- ◆ Importance of FGDC standards
- ◆ FGDC Standards Working Group (SWG) responsibilities
- ◆ Review of FGDC standards process
- ◆ Time to develop FGDC standards
- ◆ External standards
 - FGDC participation in external standards bodies
 - FGDC endorsement of external standards
 - Alignment with Geospatial Intelligence Standards WG standards process
- ◆ SWG needs for participation





Status of FGDC Standards Projects

Status of FGDC Standards Projects

Cultural Resources Spatial Data Standard

- ◆ Status: set up project.
- ◆ The standard will be used to create, maintain, and distribute cultural resource spatial data. It will ensure that geospatial data are linked to attribute databases that describe each cultural resource.
- ◆ An initial teleconference was held October 26.
- ◆ The next work group teleconference will be held Tuesday, January 25, 3 PM.
 - NPS has released a work plan for review at the telecon.
 - NPS has released descriptions of 6 task groups. NPS would like to have a good idea of who will be participating on the task groups for the telecon.
- ◆ Contact: Deidre McCarthy, Deidre_McCarthy@nps.gov, 202-354-2141



Status of FGDC Standards Projects

Shoreline Data Content Standard

- ◆ Current status: final draft.
- ◆ This standard is intended to enhance the shoreline framework by providing technical guidance on shoreline semantics, data structures, and their relationships to builders and users of shoreline data.
- ◆ Standard is currently being revised and updated.
- ◆ Next steps to advance the standard: resubmit final draft for comment.
- ◆ Contact: Doug Graham,
Doug.Graham@noaa.gov, 301-713-2675 x170



Status of FGDC Standards Projects

United States Thoroughfare, Landmark, and Postal Address Data Standard (Draft)

- ◆ Current status: Out for CG vote for approval for FGDC endorsement. Ballot closes January 19.
- ◆ This standard specifies data content, data classification, data quality, and data exchange in XML for street addresses and landmark addresses and points of postal delivery.
- ◆ The SWG held a special web conference/telecon to discuss the final draft on December 16. At the meeting, the SWG recommended that the CG approve the standard for FGDC endorsement, provided that changes concerning references, typos, and country name and code issues are made to the standard. Those changes were made before forwarding the draft to the CG for vote.
- ◆ 11 states have committed to adopt the final version, and many states and numerous local governments are already working with it.
- ◆ Some content in the Transportation parts of the Geographic Information Framework Data Content Standard needs to be reconciled with the Address Data Standard. Reconciliation will be done during the TRB meetings January 25th.
- ◆ Contact: Martha Wells, mwells@spatialfocus.com, 205-616-0205, about content.

Status of FGDC Standards Projects

Coastal and Marine Ecological Classification Standard (CMECS)

- ◆ Current status: In public review. Public review will close mid-January.
- ◆ CMECS provides a means of classifying ecological and habitat units using a common terminology.
- ◆ Experts from federal agencies and academic institutions have agreed to serve as peer reviewers of the CMECS draft standard.
- ◆ Presentations and briefings continue for key stakeholder groups.
- ◆ Comments continue to be received.
- ◆ New pilot projects are being initiated.
- ◆ Presentations and sessions are planned for important conferences.
- ◆ Contact: Mark Finkbeiner, mark.finkbeiner@noaa.gov, 843-740-1264



Status of FGDC Standards Projects

Federal Buildings and Facilities Geospatial Data Content Standard

- ◆ Current status: comparing data content models.
- ◆ Goals:
 - Facilitate Collaborative Spatial Data Standards
 - Provide Guidance for Acquisition and Production
 - Develop a Uniform Framework for data content
 - Data Collection requirements & Data descriptive data elements
 - Develop Production standards for Life cycle data theme management
- ◆ Meeting December 1: Presentation to review existing mandates . Discussion: adding NIEM and the RP Valuation e-xml from OSCRE to the matrix.
https://my.usgs.gov/alfresco/faces/jsp/....._BandFDTL_Community_workspace
- ◆ Future weekly meetings: Wednesday 1-3.
- ◆ Planning for mid January 2010 in-person meeting.
- ◆ All agencies are encouraged to participate.
- ◆ Contact Sandra Downie, sandra.downie@gsa.gov



Status of FGDC Standards Projects

Federal Trails Data Standard

- ◆ Current status: final draft released for SWG review. Pending SWG recommendation.
- ◆ The functional scope of the standard includes the definition of a core set of trail data attributes, corresponding values, and definitions.
- ◆ The project was dormant and has now been reactivated.
- ◆ Contact: David Duran, David_Duran@nps.gov, 303 969-2176.



Status of FGDC Standards Projects

National Wetland Classification Standard

- ◆ Current status: working draft in progress
 - Working to get the revised draft out for review and discussion for January teleconference.
- ◆ The objective is to produce a newly edited and updated version of the wetlands classification standard, *Classification of Wetlands and Deepwater Habitats of the United States*.
- ◆ Contact Bill Wilen, Bill_Wilen@fws.gov, 703-358-2278



Standardization Feedback Requested for Sub-Committee on Standards

- ◆ NIST issued an RFI via the Federal Register (2010-12-08) on effectiveness of Federal agency participation in standardization in select technology sectors for the National Science and Technology Council's Sub-Committee on Standardization.
- ◆ The RFI may be found at <http://edocket.access.gpo.gov/2010/2010-30864.htm>
- ◆ Comments are due on or before 11:59 p.m. on February 7, 2011.
- ◆ Please return comments to Julie Maitra by Monday, February 1.



Importance of FGDC Standards

- ◆ FGDC standards are referenced in:
 - OMB Circular A-16.
 - OMB Circular A-16 Supplemental Guidance.
 - Executive Order 12906
- ◆ FGDC standards are used by Feds and non-Feds alike.
- ◆ FGDC standards are recognized by NIST for use in E-Gov Initiatives
- ◆ FGDC standards, notably Metadata, have been the basis for international standards.

SWG Responsibilities

- ◆ Assist the FGDC Coordination Group in promoting the development, maintenance, and management of a National Spatial Data Infrastructure.
- ◆ Coordinate the maintenance of FGDC-endorsed standards with the designated maintenance authorities.
- ◆ Coordinate the standards activities of the subcommittees and other working groups of the FGDC throughout the FGDC standards process.



SWG Responsibilities

- ◆ Facilitate and coordinate the evaluation of geospatial data definitions and standards of other organizations, especially other national and international standards bodies and, when appropriate, incorporating these definitions and standards into FGDC standards or standards activities according to FGDC established procedures.
 - External standards bodies include ISO, OGC, and INCITS Technical Committee L1.
- ◆ Assure that the standards developed are coordinated with State, local, and tribal governments, the private sector and academic community, and, to the extent feasible, the international community and that the needs of data producers and users are addressed.

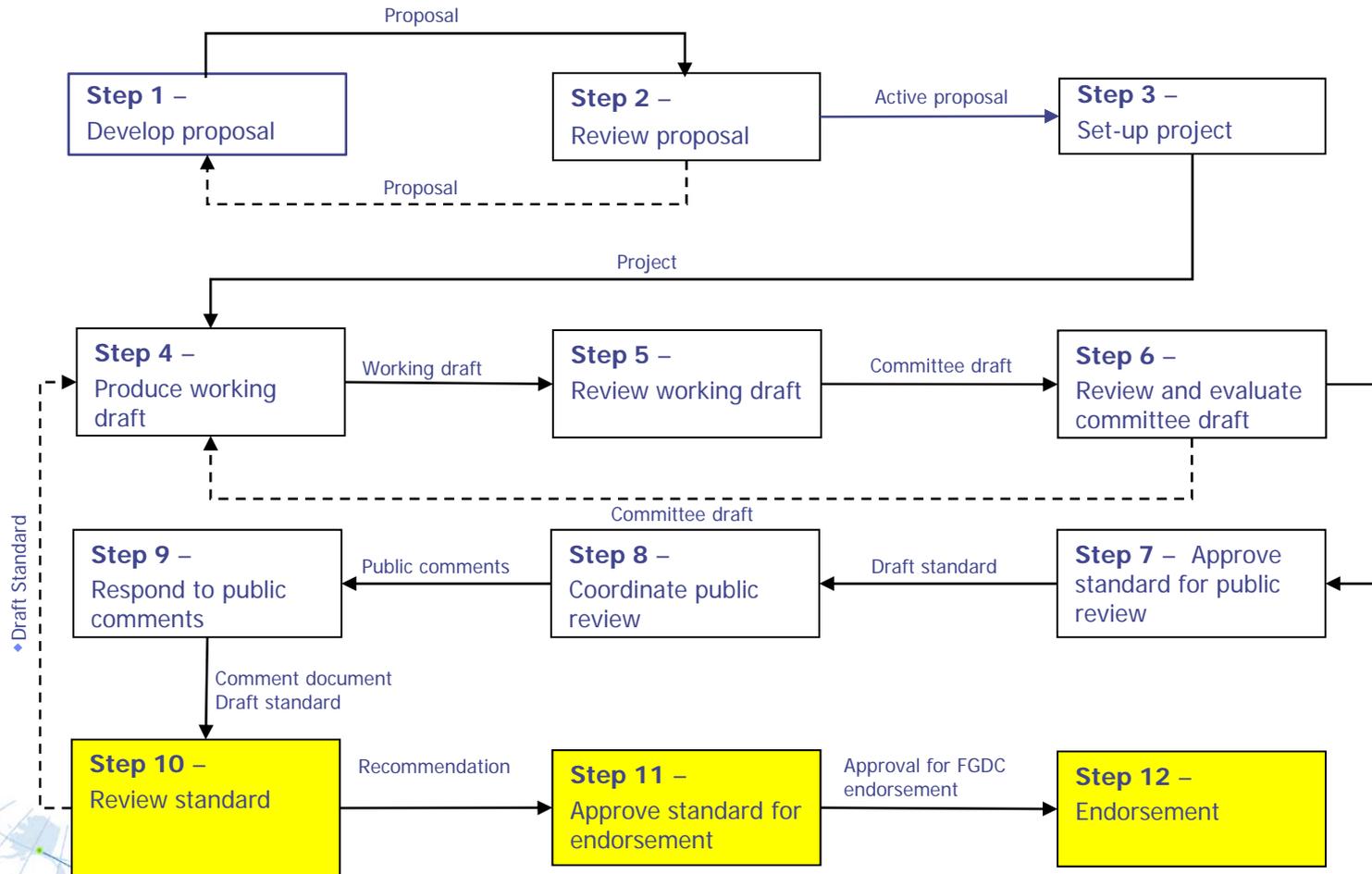


Review of FGDC Standards Process

STAGE	STEP	CUSTODIAN
PROPOSAL	1- Develop Proposal	FGDC standards development group
	2 - Review Proposal	SWG
PROJECT	3 - Set Up Project	FGDC standards development group
DRAFT	4 - Produce Working Draft	FGDC standards development group
	5 - Review Working Draft	FGDC standards development group
REVIEW	6 - Review and Evaluate Committee Draft	SWG
	7 - Approve Standard for Public Review	FGDC Coordination Group (CG)
	8 - Coordinate Public Review	FGDC Secretariat
	9 - Respond to Public Comments	Standards Development Group
	10 – Review standard	SWG
	11 - Approve Standard for Endorsement	CG
FINAL	12 – Endorsement	FGDC Steering Committee



Review of FGDC Standards Process



Steps for Non-Federally Authored Standards and Specifications

FGDC Standards Time Requirements

- ◆ There are no time limits specified for standards development groups to do their work.
- ◆ Frequently, other priorities override FGDC standards development
 - for example, Deepwater Horizon.
- ◆ Standards development groups go through a rigorous process to develop their standards.
 - The focus is on quality and content of a standard.

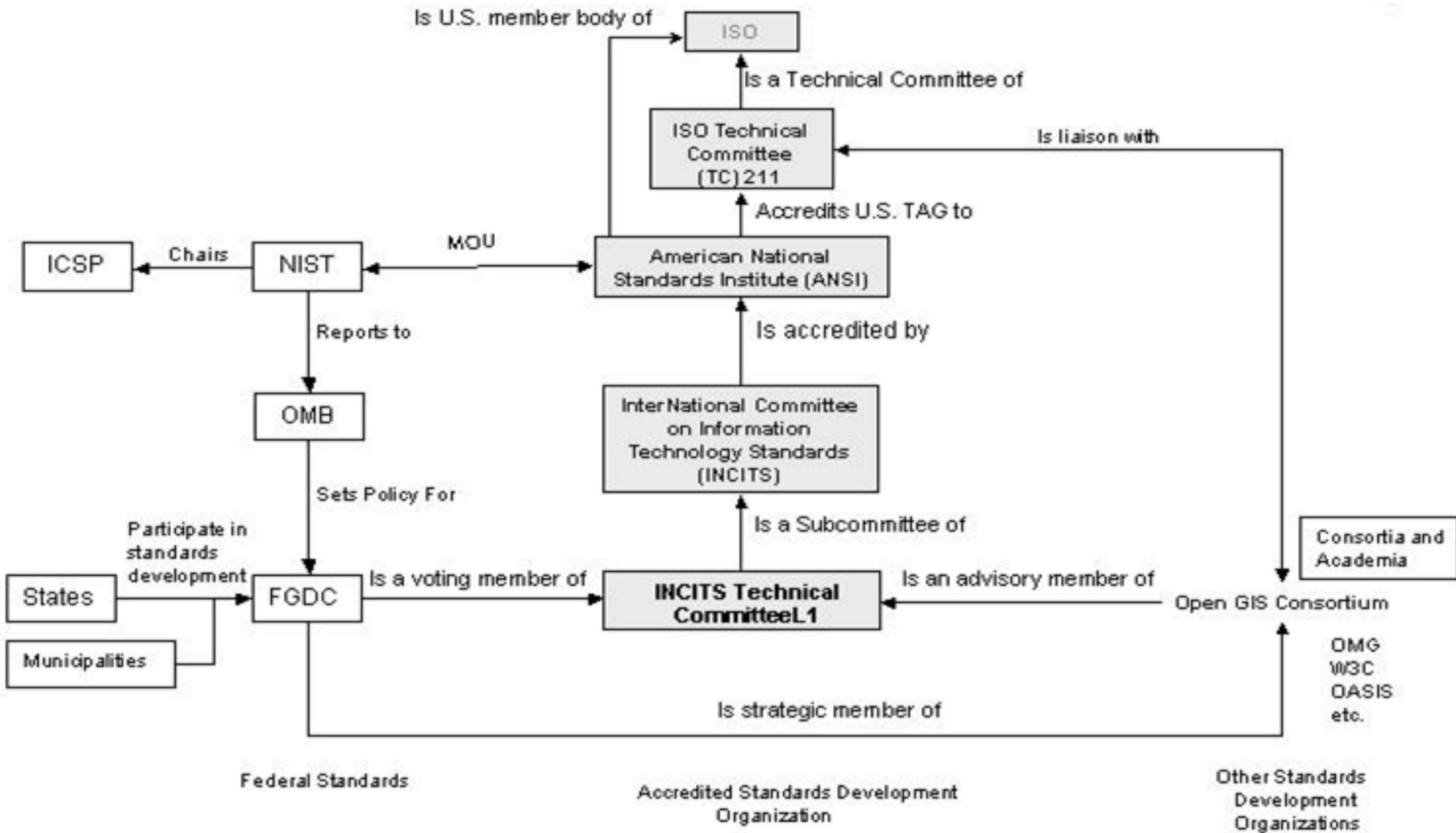


EXTERNAL STANDARDS

- ◆ FGDC participates in external standards bodies
- ◆ FGDC Endorsement of external standards
- ◆ Alignment with Geospatial Intelligence Standards WG standards process



FGDC Participation in Non-Federal Standards Bodies



FGDC Endorsement of External Standards

- ◆ A major success of the FGDC Standards WG was FGDC endorsement of 64 Non-Federally Authored Geospatial Standards, in support of the Geospatial Platform.
- ◆ This project had strong participation by the FGDC Standards WG members.
- ◆ The steps toward FGDC endorsement were in accordance with the FGDC Policy on Recognition of Non-Federally Authored Geographic Information Standards and Specifications.
 - This policy enables any FGDC member agency to request that FGDC recognize a non-Federally authored standard.
 - The FGDC Policy enables a fast track to FGDC endorsement of external standards.
 - This activity was the first opportunity to exercise this policy.



FGDC/GWG Standards Process Alignment

- ◆ The FGDC Secretariat and the Geospatial-Intelligence Standards WG (GWG) are evaluating alignment of their respective standards processes.
- ◆ This alignment is important, in view of Geospatial Visualization as an Enterprise Service (GV-ES) and the Geospatial Platform.
 - Fiscal Year 2011 Priorities and Tasks for Geospatial Platform:
Evaluate GV-ES capability for the Geospatial Platform and develop a plan for implementation.
- ◆ Platform represents cross-domain business requirements.
- ◆ GWG focuses on geospatial technology standards.
- ◆ GWG has three polling session a year to vote on Change Requests for inclusion or retirement from the DISR (next is February 10, 2011).



February 10 GWG Polling Session

- ◆ Next GWG polling session on standards: February 10. GWG polling session is part of DISR 11-01 cycle (year and session #, i.e. 2011 polling session 1)
- ◆ The GWG Secretariat releases a Change Request package for consideration for vote at GWG Polling Session 30 days in advance of meeting.
- ◆ The FGDC OS releases the Change Request package to the CG and SWG for comment, that contains the proposed changes to standard's status
 - CG to submit comments through SWG.
- ◆ FGDC's best option is to abstain, with comment:
 - FGDC and GWG are still working to align their standards processes; consequently, FGDC does not have means for *a priori* endorsement, which would give the FGDC OS a mandate for vote at the GWG polling session.
- ◆ Despite FGDC abstentions at recent GWG polling sessions, the FGDC will review standards from previous DISR cycles for consideration for FGDC endorsement.
- ◆ This is intended as a process of "catch-up" until we can align the FGDC CG and SC approvals of proposed CRs with the GWG votes cycles.



SWG Needs for Participation

- ◆ Call for agency representation on SWG.
- ◆ One of the findings of the FGDC standards process review survey was that there should be more oversight of FGDC standards development – participation is key.
- ◆ The SWG needs members who will actively:
 - Review FGDC proposals and standards developed through the FGDC and propose positions for vote.
 - Represent their agency when the agency proposes an external standard for FGDC recognition.
 - Participate in GWG standardization activities – important in view of GV-ES, Geospatial Platform, and FGDC/GWG alignment.
 - Propose FGDC positions on standards under consideration in GWG.
 - Maintain an online inventory of standards under consideration in different standards bodies (GWG, INCITS L1/U.S. TAG, OGC), their status, and agency positions.



THANK YOU!

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Geospatial Intelligence Standards Working Group

GWG Briefing

*Federal Geographic Data Committee
Coordination Group Meeting
Tuesday January 11, 2011*

**Gregg Black, NGA
Chair, GWG
Director, National Center for Geospatial Intelligence Standards**

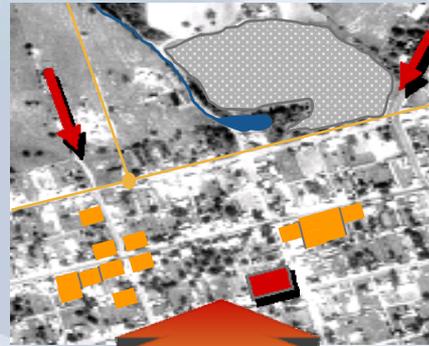
NCGIS-Mail@NGA.MIL

NGA Serves as Functional Manager for the NSG

Definition of GEOINT:

“The exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth. GEOINT consists of imagery, imagery intelligence, and geospatial information.”

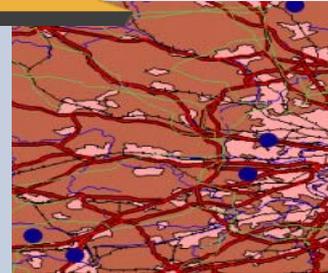
GEOINT



Imagery



Imagery
Intelligence



Geospatial
Information

NGA Mission

*To Provide Timely,
Relevant, and
Accurate GEOINT in
support of National
Security*

Intelligence
Agency

Combat
Support
Agency

National System for Geospatial Intelligence (NSG): A unified community of geospatial intelligence (GEOINT) experts, producers and users organized around the goal of integrating technology, policies, capabilities and doctrine to produce GEOINT in a multi-intelligence environment



GWG

Inaugurated January 2005



- ◆ **Working as a Community:**
- Participatory governance – ***the community forum*** for all standardization activities & functions related to GEOINT
- Bring ***subject matter experts*** together within the DoD and IC to fully address GEOINT standards matters
- Enhance our ability to ***manage and share GEOINT data*** among disparate groups

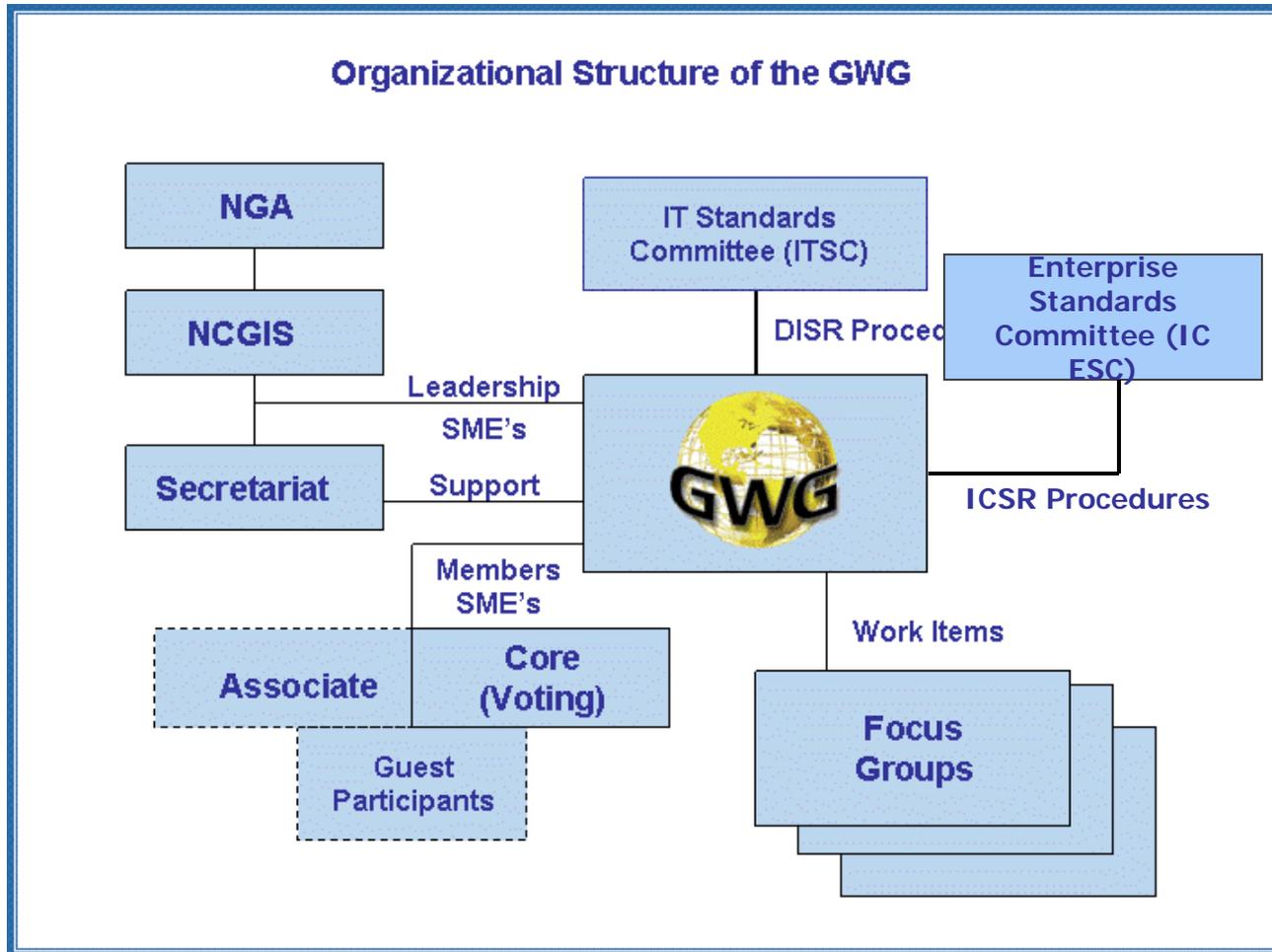
GWG Standards Strategy

- Support NGA's *Functional Management of GEOINT standards* for the National System for Geospatial Intelligence (NSG)
- Formally recognized *Joint Technical Working Group* under DoD IT Standards Committee (ITSC) and Intelligence Community Enterprise Standards Committee (IC ESC)
 - *Recommend GEOINT standards for the DoD IT Standards Registry (DISR) and Intelligence Community Standards Registry (ICSR)*
- Official DoD GEOINT standards *Community of Interest* (COI)
- GEOINT community forum that coordinates and develops DoD/Intelligence Community *positions in GEOINT standardization*

Responsibilities outlined in *DoD 5105.60 (revised Jul 09 – NGA Charter) & NSG Directive 8100*



Functional Management



Eight Focus Groups are the *primary mechanism for Community engagement* with subject-matter-experts (SMEs)



26 Core Members



**U.S. Govt.
Agencies**

- **FGDC**
- CIA
- NRO
- NSA
- Army
- Navy
- Air Force
- Marine Corps
- ODNI
- OSD (NII and AT&L)
- STRATCOM
- CENTCOM
- PACOM
- SOCOM
- JFCOM
- EUCOM
- NORTHCOM
- Joint Staff (J2)
- DHS
- DISA
- DIA
- DLA
- DARPA
- NGA (NASB Task Force)
- FBI
- DOE



Associate Members

**Non-US
Govt.
Partners**

- Australia, United Kingdom, Canada
- Defense Geospatial Information Working Group (DGIWG)
- International Committee for Information Technology Standards, Geographic Standards Subcommittee (INCITS/L1) [ANSI Accredited]
- International Organization for Standardization (ISO) / Chair, TC 211
- Open Geospatial Consortium (OGC)
- US Geospatial Intelligence Foundation (USGIF)
- NATO Joint Capability Group on Intelligence Surveillance & Reconnaissance (JCGISR)
- American Society for Photogrammetry & Remote Sensing (ASPRS)



GWG Focus Groups

NITFS Technical Board (NTB)

Still Imagery standards to include the tasking, collection, posting, processing, storage, exploitation, discovery, retrieval, and exchange of digital imagery and gridded data associated with GEOINT; formatting, compression, support data, metadata, graphical & textual annotations, image quality, and imagery-derived data and products; electrical optical (EO), Infra-red (IR), synthetic aperture radar (SAR) phase history data, SAR (complex & detected) imagery, multispectral imagery (MSI), hyperspectral imagery (HSI), ultraspectral imagery (USI), Polarimetric Imagery (PI), Interferometric Synthetic Aperture Radar (IFSAR), Light Detection and Ranging (LIDAR), raster maps/charts, and Ground Moving Target Indicator (GMTI)

Motion Imagery Standards Board (MISB)

Motion Imagery/Full Motion Imagery standards to include the tasking, collection, posting, processing, storage, exploitation, discovery, retrieval, and exchange of motion imagery, associated metadata, audio and other related media types

Community Sensor Model Working Group (CSMWG)

Sensor models for GEOINT services; production and applications standards for interoperable sensor models that enable the efficient collection and distribution of GEOINT source data

Geographic Portrayal (PFG)

Portrayal standards for the visual depiction of physical features and geographically referenced activities; visual symbolization of GEOINT and symbol design, for both digital display and hardcopy media; rules and behaviors of GEOINT symbols necessary to ensure consistent rendering; interoperability in the exchange of portrayal information



GWG Focus Groups

Application Schemas for Feature Encoding (ASFE)

Standardization of GEOINT relating to **data structures, exchange and storage** of geospatial intelligence; **data format, feature and attribute coding schemes**, exchange media, administrative procedures, representations of geographic feature geometry, feature attribution information, and other geographic information. Development of the **GEOINT Structure Implementation Profile**- four components that define a common method for specifying and encoding GEOINT and related geospatial data (Entity Catalog/Feature Data Dictionary, Application Schema, Data Content Specifications/Extraction Guides, Platform Specific Models)

Metadata (MFG)

Standardization of GEOINT relating to **imagery, sensor and geospatial metadata**; coordination of activities between the various recognized organizations; leading role in the development of standardized metadata in their respective communities (ANSI – INCITS/L1, ISO TC/211, Open Geospatial Consortium)

Information Transfer and Services Architecture (ITSA)

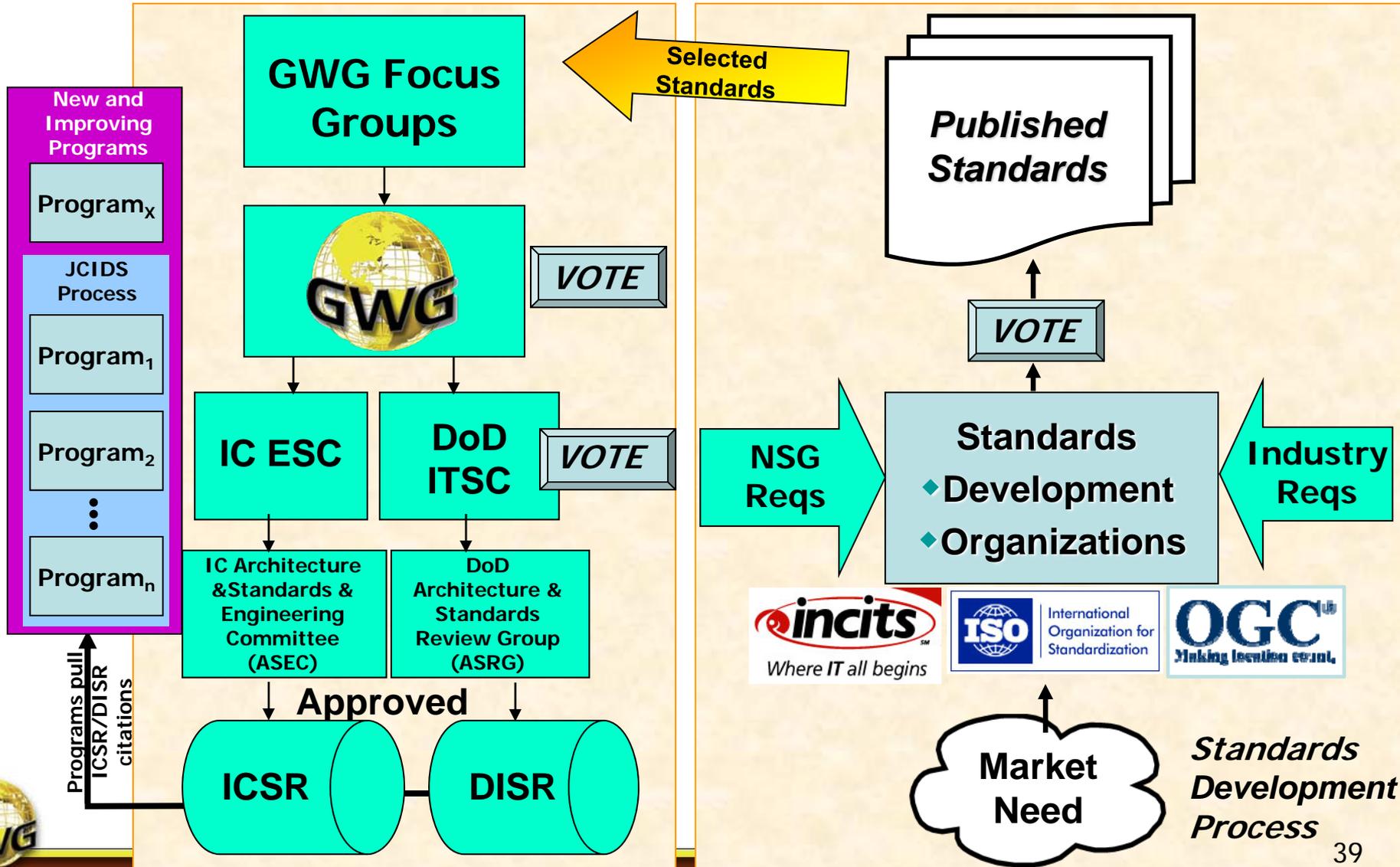
Standards related to **information transfer** (the movement of information from one system to another) that provide for posting, discovery, access, and analysis of GEOINT data stores and information stores in a distributed, real-time environment; GEOINT **service architecture standards** - technologies that enable service chaining interoperable service components; Open Geospatial Consortium and ISO TC /211 standards; standards of interest to developers of services and service architecture components within a distributed, collaborative, geospatial environment, and by advanced designers of service algorithms, service chains, and service-to-service interfaces

Overhead Persistent Infrared (OFG)

Standards to enable **Overhead Persistent Infrared (OPIR) remote sensing**; resolution of issues across functional domains concerning OPIR data and metadata standards development in support of fostering net-centric data services; improve support to operations and intelligence by exposing OPIR data in a net-centric Service Oriented Architecture



Standards Lifespan



Standards Governance – DISR/ICSR

DoD IT Standards Registry (DISR)

- A single, unifying DoD registry for approved standards citations and a registry for approved DoD IT standards profiles
 - DISR Mandated Standards – the minimum set of essential standards for the acquisition of all DoD systems that produce, use or exchange information and, when implemented, facilitate the flow of information in support of the warfighter
 - New/modified systems throughout the DoD are required to include all applicable DISR mandated standards
-

IC Standards Registry (ICSR) & IC-500-20: IC Enterprise Standards Compliance

- Signed 12/6/10 (ICS) - Defines the IC framework for:
 - Adoption of IC enterprise standards best-suited for achieving the DNI's goals of interoperability and information sharing
 - Management of an IC Enterprise Standards Baseline (ICSR) consisting of a minimal, focused, coordinated set of such standards
 - Compliance and compliance certification of those portions of IC systems and EA-related information technology items funded through the NIP



Standards Lifecycle Definitions

Emerging

- Published
- Expected to be ***mandated within three year***
 - Test, implementations, technical maturity
- May be implemented but not in lieu of mandated standard
- Use requires a waiver and a Technology Insertion Risk Assessment

Mandated

- Essential for interoperability across the enterprise
- Minimum Set of essential standards for the acquisition of all DoD systems that produce, use, or exchange info, and, when implemented, facilitates the flow of info in support of warfighter
- Required for the management, development, and acquisition of new or improved systems throughout the DoD

Retired

- New standards / technology now available and implemented
- Require waiver and Migration Plan
- Inactive, remain listed in the DISR Registry



FGDC History with the GWG

Voting

- Since 2005: FGDC has been a Core Member, participating in GWG voting meetings to adopt GEOINT standards - **FGDC is the link to the Civil sector**
- FGDC Representative to the GWG is currently the FGDC Standards Working Group (SWG) Chair- **Julie Binder Maitra**
- Historically voted “Yes” on GWG GEOINT standards recommendations for adoption

June 2010: FGDC SWG Chair abstains at GWG voting meeting

“The FGDC is reevaluating its processes for vetting and socializing the GWG GEOINT standards recommendations across its member federal civil organizations for the purpose of fostering interoperability among the defense, intelligence, and civilian sectors and leveraging the potential use of these standards by its member agencies”.

Oct 2010: FGDC SWG Chair socializes GWG standards recommendations

- Provides GWG voting recommendation to FGDC SWG and Coordination Group 30 days prior to GWG Voting Meeting
- “Abstains” on some motion imagery and NGA –developed standards
- Votes “Yes” on others: **Line of Business alignment** acknowledged by Standards Working Group members



FGDC and the GWG Integration

Participation is Key!

- **Seek FGDC CG commitment to “FGDC Actions and Next Steps To Integrate Standards Development Activities with the GWG” (as detailed in follow-on slides)**
- **Work towards FGDC vote at the GWG signifying true “FGDC Endorsement”**
- **Review GWG Focus Group activities and standards to identify areas of interest**
- **Call for FGDC participation - Provide SMEs to both the FGDC SWG and GWG Focus Groups**

Full listing of GEOINT Standards managed by the GWG is available at <https://nsgreg.nga.mil/DISR-approved.jsp>





Geospatial Intelligence Standards Working Group

[GWG Home](#)

[NSG Standards Registry](#)

[Standards and Registries](#)

[Focus Groups](#)

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About The GWG

The GWG is Chartered under the Department of Defense (DoD) Information Technology Standards Committee (ITSC), the governing group responsible for developing and promoting standards interoperability in support of net-centricity within the Department of Defense (DoD). The GWG provides the forum for the coordination of GEOINT standards for the National System for Geospatial-Intelligence (NSG). The GWG is led and chaired by the NGA's [National Center for Geospatial Intelligence Standards \(NCGIS\)](#).

The GWG serves as the GEOINT community advocate for Information Technology (IT) standardization activities related to GEOINT and assists the Director of the NGA in carrying out Functional Manager responsibilities for GEOINT standards.

The primary responsibilities of the GWG are to 1) coordinate population of the DoD IT Standards Registry (DISR) with GEOINT standards and 2) serve as the NSG community forum for all standardization activities and functions related to GEOINT.

The GWG consists of eight chartered focus groups made up of subject matter experts that address topical issues related to GEOINT standards.

[GWG and Focus Groups Overview](#)

Geospatial Intelligence Standards: The Basics

[Introduction](#)

[Part 1: Standards Fundamentals](#)

[Part 2: Overview of GEOINT Standards](#)

[Part 3: Managing GEOINT Standards](#)

NEWS

Click here to access the [NSG Standards Registry](#) which provides for the discovery, traceability, and lifecycle management of GEOINT Standards

The NSG Standards Registry now hosts the GEOINT standards in DISR [PocketGuide](#) and citations. Click here for access to the [Pocketguide 10-2](#)

Upcoming Events

[NTFS Technical Board \(NTB\) Meeting](#)
December 14, 2010

[MISB Conference](#)
January 24-27, 2011
Herndon, VA

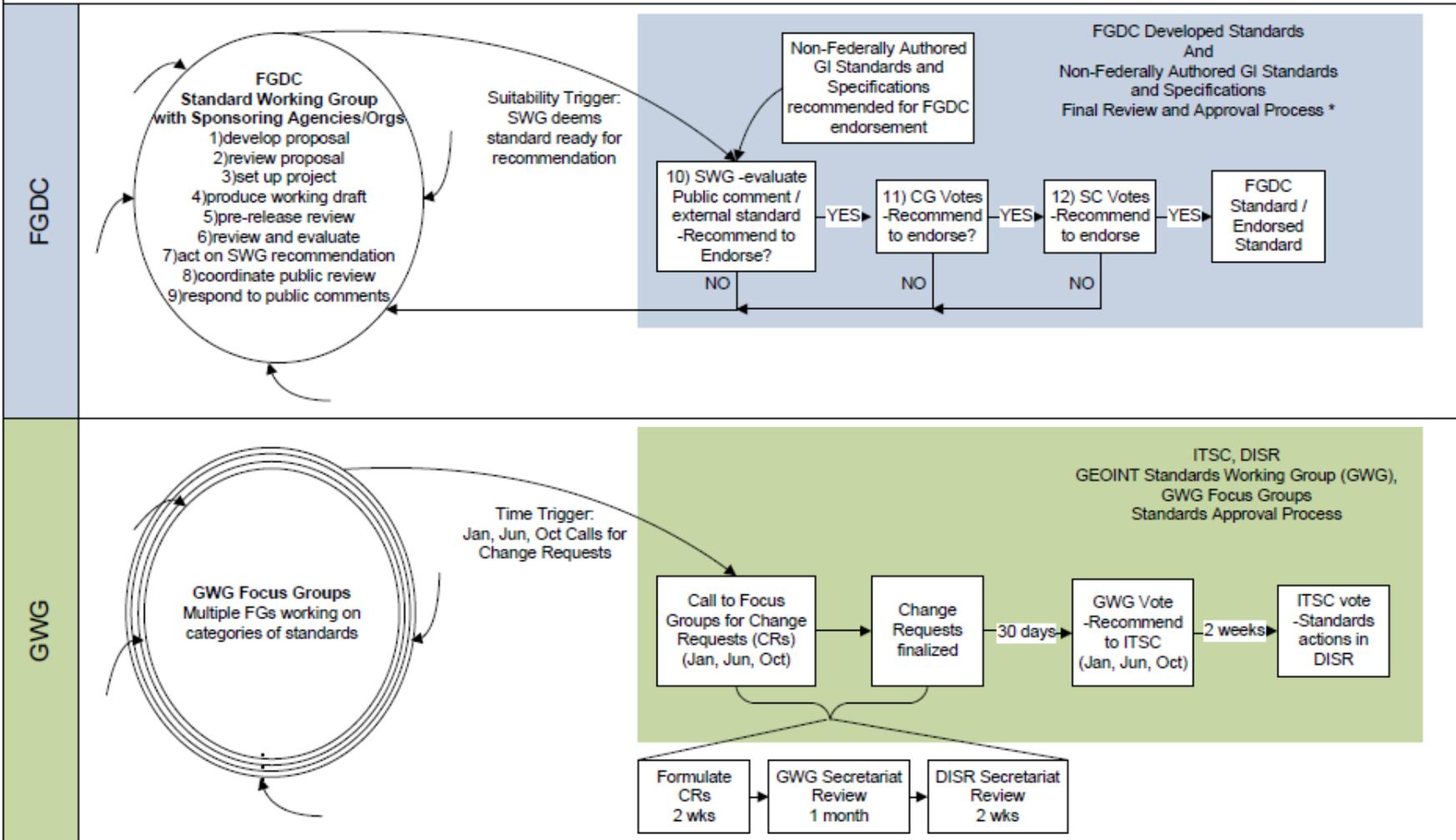


www.gwg.nga.mil



FGDC Actions and Next Steps To Integrate Standards Development Activities with the GWG

Comparison between the FGDC and GWG Standards Development and Review Processes



*FGDC Standards actions are not tied to a set calendar schedule. They rely on the recommendation of the Standards Working Group to determine when a standard is ready to begin the next process step. The final review process and CG and SC approvals (steps 10, 11, 12) are time limited to the extent possible, once they begin.

Key Factors for Success

- ◆ FGDC participation at the GWG Focus Group level, with trusted SMEs able to recommend FGDC position to CG
- ◆ Two-way, frequent, timely communications
- ◆ Timely CG/SC endorsement of standards coming up for vote (<1 month lead time)
- ◆ SC endorsement enables the FGDC OS vote at the GWG to mean true FGDC endorsement
- ◆ Tracking standards status (pending, coming up for vote, in vote, etc.) and FGDC position



Actions / Next Steps

- ◆ CG motion to move these efforts forward
- ◆ Establish a CG Task Team to:
 - Review/adjust the processes/recommendations
 - Work out a joint solution with GWG
 - Establish and validate an operating procedure for CG recommendation and SC concurrence
 - Identify FGDC member participation requirements AND representatives
 - Recommend any FGDC SWG operations changes required to facilitate integration and increase success
 - Refine the recommended reporting approach
 - Review a new approval process focused not on consensus but on **opportunity for substantive objections**
 - Evaluate the process through 2 GWG CR cycles
 - Facilitate the FGDC review of outstanding GWG standards to bring FGDC and GWG into close alignment



DISCUSSION? QUESTIONS?

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Back Up Slides Read A-heads



Focus Group Summaries



Application Schemas for Feature Encoding (ASFE)

The ASFE:

- Addresses standards related to the **encoding of features** used in the production of GEOINT and GEOINT products
- Develops GEOINT product specifications, standards for electronic feature catalogues, and conceptual schemas for data required by one or more applications

The ASFE Human Geography (HG) Working Group:

- Serves as subject matter experts and as a coordinating body chartered to address the development of a data dictionary, data standards, a common vocabulary, and lexicon for the standardization of HG data
- Will standardize the lexicons and vocabularies used in the representation, exchange, portrayal, and analysis of HG data

Human Geography: an interdisciplinary approach to describing spatial and temporal patterns of human behavior in the context of their environment as it applies to Geospatial Intelligence



NITFS Technical Board (NTB)

The technical focal point for **still imagery**, and still imagery-related standardization activities across the NSG

The NTB:

- Facilitates the selection, development, adoption, implementation, and testing of standards that are essential to the interoperability and quality of still imagery
- Addresses standards issues related to still imagery and gridded data, data compression, product annotation, support data, metadata, and quality



Motion Imagery Standards Board (MISB)

- Formulates, reviews, and recommends standards, recommended practices, and engineering guidelines for motion imagery, video, associated metadata, audio, and other related systems
- Promotes world-wide interoperability based largely on open, international, commercial standards to leverage large commercial R&D investments
- Leads the Motion Imagery community and Manages the Motion Imagery Domain Space to deliver universally interoperable, superior quality, cost manageable motion imagery systems to our warfighters / decision maker



Community Sensor Model Working Group (CSMWG)

Establishes standards for interoperable **sensor models** that enable the efficient **collection and distribution** of GEOINT source data

The CSMWG:

- Develops, verifies, validates, maintains and conducts configuration management of sensor model standards
- Collects and maintains community technical requirements for sensor data



Portrayal (PFG)

Facilitates the development, implementation, and interoperability of standards relating to the **visual depiction of physical features and geographically referenced activities**

The PFG:

- Addresses visual symbolization of GEOINT and symbol design for both digital display and hardcopy media
- Coordinates symbology requirements and develops and populates standards registries for GEOINT



Metadata (MFG)

Dedicated to coordinating and harmonizing GEOINT **metadata** standards activities to advance data interoperability across the NSG

The MFG:

- Supports development of a Core GEOINT metadata standard, CORE extensions that support specialized GEOINT areas, and schemas for the exchange and storage of GEOINT metadata
- Participates in metadata standards forums within the Intelligence Community, Department of Defense, and other U.S. and International Standards bodies, such as ISO TC211, to ensure NSG metadata requirements are addressed



Information Transfer and Services Architecture (ITSA)

Addresses **data services** needed to support GEOINT in a distributed, real-time environment

The ITSA Focus Group:

- Identifies requirements for standards and services needed to support network transfer, such as metadata standards and web and catalog services
- Evaluates emerging service architecture components and technologies



Overhead Persistent Infrared (OFG)

- Overhead Persistent Infrared (OPIR) Focus Group
- Formerly under the NTB
 - Metadata Profile Working Group (MPWG)
 - Overhead Non-Imaging Infra-Red Subgroup
- STRATCOM/AFSPACEC/ARSTRAT
 - Rather than stand-up a separate DoD OPIR COI
- Drafting an ONIR Focus Group Charter
- Ensure that ONIR data/metadata are visible & accessible

OFG Wiki

https://www.intelink.gov/wiki/OPIR_Focus_Group_%28Standards%29



Three Levels of Activities

- **GWG Plenary Sessions**

- May & October - Typically at USGS in Reston, VA
- Networking, information sharing, educational forum
- Unclassified

- **GWG Voting Meetings**

- Three times each year - **Next Feb 2011**
- Consensus for GEOINT standards for the DoD and IC Standards Registries (DISR/ICSR)
- Only open to Core (U.S. federal agencies) Representatives

- **GWG Focus Groups**

- SMEs meet as needed throughout the year (most are unclassified)
- Many Focus Groups opt to meet in conjunction with the Plenary meetings



Opportunities for Participation and Exchange

- **GWG Plenary Sessions** – May/June & Oct
 - Networking, information sharing, educational forum
 - No virtual participation means in place at this time
- **GWG Focus Groups** - meet throughout the year many with virtual participation
- **GWG Voting Meetings** –
 - For GEOINT standards for three DISR/ICSR baselines per year
 - Core Member Reps (U.S. federal agencies)
 - Opportunity for Core Reps to engage/collaborate
 - **May/June, Sept/Oct, Jan/Feb (3 meetings per year)**
- **Monitoring** is easy – information is posted on the GWG website and distributed via the GWG List Server. Get access to the Members' website

