

## About This Standard

Mandated

**Standard Identifier** DFDD 2007-1

**Title of Standard**

DGIWG Feature Data Dictionary (DFDD) Version 2007-1

**Standards History**

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/Retired
2007-11-06	n/a	2007-11-06	2007-11-06	2007-11-06	n/a

**Replaced** [DGIWG FDD \(DFDD\)](#)

**Standards Body** [NGA](#) [Broken Link?](#)  
**URL to Access or Acquire** <http://www.gwg.nga.mil>

**Working Group**

**Primary Owner** Geospatial Intelligence TWG (GWG)  
**Secondary Interests** Modeling and Simulation TWG  
Warfighting

**Service Area** GEOINT: Geospatial

**KIPs** No KIP Found

**Standard Applicability**

**2007-11-08**

The DFDD is applicable to the storage, manipulation, interchange, and exploitation of geospatial intelligence data. It specifies a set of well-defined feature types and attributes that may be used to determine semantic content when designing a domain data model and its supporting data element dictionary.

**Standard Abstract**

**2007-11-08**

This NATO standard (DGIWG Feature Data Dictionary - DFDD) specifies geospatial information concepts used by member nations of the multi-national Digital Geographic Information Working Group (DGIWG) community. These concepts characterize aspects of real-world entities (or objects) and related properties, including those that are not necessarily visible or have a tangible physical form (e.g., airspace). The DFDD is a comprehensive dictionary and coding scheme for feature types, feature attributes (properties or characteristics associated with features), and attribute values (domain of feature attributes). A register-based web-enabled standardized dictionary is required to support encoding in order to maximize interoperability and to understand the production, exchange, distribution, and exploitation of digital geographic data. Registers of feature information (e.g., feature data dictionaries and feature catalogues) serve as sources of reference for similar registers established by other geospatial information communities as part of a system of cross-referencing. Multiple

communities cooperate and participate within the DGIWG and the NGA to realize an International Standards-based system of interlinked registers sharing a common information model (ISO 19110 conformant), a common management model (ISO 19135 conformant), and a common technical realization (ISO 19126 conformant). The DGIWG supports a DFDD-related National Extensions Feature Data Dictionary (NE FDD) register allowing for individual nations to specify "national" feature types and feature attributes for cases where such feature types and feature attributes are not yet formally agreed on for inclusion in the DFDD. National extensions may not be specified within the normative DFDD and may not support interoperability until proposed and approved and be subsequently incorporated into the normative DFDD.

### **Profiling Questions**

- GEOINT: Geospatial**
- Does the application require access to definitions or descriptions of items of geospatial information?

### **Products Incorporating This Standard**

NGA Mission Specific Data Levels 1-5

### **Relevant Information**

Within the DISR the DGIWG FDD (DFDD) was moved from emerging status to mandated status on October 2005. Since that time many feature types and attributes have been added, primarily at US request. The intent of this action is to retire the DFDD 2005 mandated version and replace it with DFDD 2007-1 as mandated. The DFDD 2007-1 is backwards-compatible with the currently mandated DFDD 2005-2. This natural evolution will ensure that DISR users are aware of and have access to the enhanced DFDD during their system development and/or upgrade activities. Citation authored by the GWG Application Schemas for Feature Encoding Focus Group.

### **Implementation Guidance**

The DFDD 2007-1 is backwards-compatible with the currently mandated DFDD 2005-2, therefore guidance applied in the use of DFDD 2005-2 continues to apply. For system-specific recommendations for integration and employment of the DFDD (e.g., within the C/JMTK or in concert with web-based services such as the Web Feature Service (WFS) - ISO 19142), contact the NGA / National Center for Geospatial Intelligence Standards (ncgis-mail@nga.mil). In particular, experienced assistance is available for the migration of existing FACC-based systems, capabilities, specifications, and formats to a DFDD-basis.

### **Standard Selection Criteria**

#### **Net-Centric Interoperability**

The register-based and web-enabled DGIWG FDD is one of a family of standards developed by the multi-national Digital Geospatial Information Working Group (DGIWG) to support acquiring, processing, analyzing, accessing, presenting and transferring geospatial information in digital/electronic form between different users, systems and locations. This standard is designed to support net- and data-centric specification of items of geospatial information.

#### **Technical Maturity**

DGIWG FDD is the product of a fundamental review of the DGIWG FACC, a predecessor that was developed, maintained, and enhanced since 1989 on the

basis of evolving information systems technology. DGIWG FACC is in active use within NGA, the National System for Geospatial-Intelligence (NSG), & military coalition members (both within & outside of NATO). The DGIWG FDD replaces the retired (July 2004) DGIWG FACC, & leverages applicable International Standards, NSG system-development lessons-learned, & maturation in the commercial marketplace. DGIWG FDD specifies a set of well-defined feature types and attributes that may be used to determine semantic content when designing a domain data model & its supporting data element dictionary. DGIWG FDD was first released August 2004. It is the basis for the Multinational Geospatial Co-production Program (MGCP), the NATO CoreGIS capability, the NSG Feature Data dictionary (NFDD) & Entity Catalog (NEC), and evolving NSG & NGA system developments.

### **Public Availability**

The DGIWG FDD is published in several forms and is publicly available at an SSL-enabled open-access web site:  
<https://www.dgiwg.org/FAD/registers.jsp?register=DFDD>.

### **Implementability**

The DGIWG FDD specifies geospatial information concepts used by member nations of the DGIWG community to characterize real-world entities (or objects) and related properties. Technology appropriate for implementing and using these geospatial information concepts is well established. In particular, the DGIWG FDD has been regularly used within a net-centric architecture based on Open Geospatial Consortium (OGC) open web services such as the Web Feature Server (WFS - ISO 19142) and in relational DBMS (including COTS GIS) environments.

### **Authority**

This standard was developed and is maintained by the multi-national Digital Geospatial Information Working Group (DGIWG). The DGIWG FDD superseded the DGIWG FACC within the NSG in October 2005. DGIWG FACC is a component of NATO Standardization Agreement (STANAG) 7074 - Digital Geographic Information Exchange Standard (DIGEST). The DGIWG FACC is used by MIL-STD-2407(1) - Interface Standard for Vector Product Format (VPF) and several active MIL-PRF specifications, including: MIL-PRF-32118, MIL-PRF-89023(1), MIL-PRF-89033(1), MIL-PRF-89035A, MIL-PRF-89037A, MIL-PRF-89039(2), MIL-PRF-89040A(2), MIL-PRF-0089049, MIL-PRF-89049/10, MIL-PRF-89049/11, MIL-PRF-89049/12, and MIL-PRF-89049/14.

**Standard Type** Military

**Keywords for Search** None