

About This Standard

Emerging

Standard Identifier AIXM v4.5

Title of Standard

Aeronautical Information Exchange Model, Version 4.5, September 2005

Standards History

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/Retired
2006-10-25	2006-10-25	n/a	2006-10-25	2008-04-03	n/a

Standards Body [Other](#)

[Broken Link?](#)

URL to Access or Acquire <http://www.faa.gov>

Working Group

Primary Owner Geospatial Intelligence TWG (GWG)
Secondary Interests IA / Security (including Biometrics)
Aviation TWG

Service Area GEOINT: Geospatial

KIPs No KIP Found

Standard Applicability

2008-03-27

This standard is applicable to the development of systems that have requirements to share aeronautical data. AIXM 4.5 provides the mechanism to exchange information applicable to aerodromes (airports), heliports, routes, navigation aids, fixes, instrument approach procedures, instrument departures, standard terminal arrival routes, organizations, units, services, obstacles and airspace. AIXM 4.5 does not compete with any other standards. AIXM 4.5 does not complete with any other standards.

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Standard Abstract

2008-03-27

Aeronautical Information Exchange Model (AIXM) 4.5 is the XML standard exchange format based off the Aeronautical Information Conceptual Model (AICM) containing hundreds of entities, data types, and relationships used to represent aeronautical data based on ICAO (International Civil Aviation Organization) and industry standards requirements for international aeronautical data, recommended practices, and data concepts from published aeronautical

information products. AIXM and AICM were originally developed by EUROCONTROL to aid in standardizing data exchange and aeronautical products within the European States.

2006-10-25

The Aeronautical Information Exchange Model (AIXM) 4.5 is the XML standard exchange format that is based on the Aeronautical Information Conceptual Model (AICM). AIXM contains hundreds of entities, data types, and relationships used to represent aeronautical data based on International Civil Aviation Organization (ICAO) and industry standards requirements for international aeronautical data, recommended practices, and data concepts from published aeronautical products. AICM and AIXM were originally developed by EUROCONTROL to aid in standardizing data exchange and aeronautical products within the European States.

Profiling Questions

GEOINT: Geospatial

- Do you require a system-to-system exchange of aeronautical data or do you need a data model for representing aeronautical data or are you working with aeronautical data such as airports, runways, routes, airspace, navigation aids and/or procedures?

Products Incorporating This Standard

None

Relevant Information

This citation authored by the GWG Application Schemas for Feature Encoding (ASFE) Focus Group.

Implementation Guidance

AICM/AIXM 4.5 should be used in association with any standard or specification for a service that requires the ability to encode aeronautical information

Standard Selection Criteria

Net-Centric Interoperability

AIXM 4.5 is a standard for a XML based system-to-system data exchange. AIXM provides a standardized approach to deliver information to any commercial off the shelf computer system, and can be used with web services. AICM is a entity-relationship model of aeronautical data for which AIXM is based.

Technical Maturity

The Aeronautical Information Conceptual Model (AICM) was first developed in 1996 by EUROCONTROL. In 1999, the AIXM XML exchange model for the AICM was developed. The current version of AIXM is 4.5, released September 2005. EUROCONTROL, among various nations are using AIXM v4.5 for updates to their respected Aeronautical Information Publications (AIP) including the European Aeronautical Information System (AIS) Database (EAD). AIXM 5.0 is currently in development for a proposed release date of January 2008. AIXM 5.0 will be a completely reformatted content, and will not be backward compatible with previous versions of AIXM

Public Availability

AICM/AIXM are freely available to the public, and may be obtained at www.aixm.aero or the US Federal Aviation Administration (www.faa.gov/aixm) or EUROCONTROL (www.Eurocontrol.int)

Implementability

The European Organization for Safety of Navigation (EUROCONTROL) has been successfully using AIXM as an exchange standard between its member states to update the European AIS Database (EAD) for many years. Canada and partner NavCanada currently use AIXM to exchange their aeronautical data and update their Aeronautical Information Publications. The National Geospatial-Intelligence Agency (NGA) aeronautical division has transitional efforts underway to modernize the source workflow process and product line. The AIXM standard is anticipated to be a large component driving that transformation.

Authority

AIXM 4.5 is managed by an international change control board currently hosted by EUROCONTROL.

Standard Type Non-Military

Keywords for Search None