

METRIC
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1 August 2002
SUPERSEDING
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23 May 2000

PERFORMANCE SPECIFICATION
URBAN VECTOR MAP (UVMaP)

This specification has been approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification defines requirements for the U.S. National Imagery and Mapping Agency (NIMA) Urban Vector Map (UVMaP).

1.2 Purpose This product specification provides a description of the content, accuracy, data format, and design of the UVMaP product. Conformance to these specifications will assure uniformity of treatment among all mapping and charting elements engaged in a coordinated production and maintenance program for this product.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification whether or not they are listed.

2.2 Government Documents

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the current Department of Defense Index of Specifications and Standards (DODISS) and the supplement thereto, cited in the solicitation (see 6.2).

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Director, National Imagery and Mapping Agency, ATTN: National Center for Geospatial Intelligence Standards, Mail Stop P-24, 4600 Sangamore Road, Bethesda, MD 20816-5003 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

AREA MCGT

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

SPECIFICATIONS

DEPARTMENT OF DEFENSE

MIL-C-89303 - Military Specification City
Graphics, 30 November 1990

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-2407 - Vector Product Format
MIL-STD-2414 - Bar Coding for Geo-spatial Products
MIL-STD-600001 - Mapping Charting & Geodesy Accuracy
Standard, 26 February 1990

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the DoD Single Stock Point (DODSSP), 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other Government documents, drawings and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DMA Technical Manual (DMA TM) 8358.1 - Datums, Ellipsoids, Grids, and Grid Reference Systems.

NIMA Technical Report (NIMA TR) 8350.2 - Department of Defense World Geodetic System.

(Copies of the above publications are available from the Defense Logistics Agency)

Digital Geographic Information Exchange Standard, Part 4: Feature and Attribute Coding Catalogue (FACC) Edition 1.2, January 1994.

(Copies of the above publications are available from the National imagery and Mapping Agency, Interoperability Standards Division (SES), Mail Stop D-86,4600 Sangamore Road, Bethesda, Md. 20816-5001.)

2.3 Non-Government Publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified,

the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

Bureau of the Budget, United States National Map Accuracy Standard, GPO, 1947.

(This standard is printed in its entirety in Thompson, Morris M., Maps for America, U.S. Geological Survey, 3rd ed., 1988, p. 104)

ISO 9660. 1988 (E). International Organization for Standardization Information Processing - Volume and File Structure of CD-ROM for Information Interchange. First ed., 1988.

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, NY 10018.)

(Non-government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other information services.)

2.4 Order of Precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications or specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First Article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.

3.2 Accuracy.

3.2.1 Absolute Horizontal Accuracy. This represents the difference between the recorded horizontal coordinates of features and their true positions. Absolute horizontal accuracy is expressed as a circular error at 90 percent probability (.9p).

Accuracy specifications for traditional paper maps are expressed in terms of map distances; for digital products such as UVMaP, accuracy is expressed in ground distances. The following shows the ground distance horizontal accuracy categories for UVMaP product resolution based on a 1:25,000 map scale source:

<u>Class</u>	<u>UVMaP CE</u>
1	12.5 m
2	25 m
3	50 m
4	>50 m

3.2.2 Absolute Vertical Accuracy. This represents the difference between the assigned elevation and the true elevation at a specific point. In