NATO STANDARD

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NATO GEOSPATIAL METADATA PROFILE

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NATO LETTER OF PROMULGATION

25 February 2019

1. The enclosed Allied Geospatial Publication AGeoP-08, Edition B, Version 1, NATO GEOSPATIAL METADATA PROFILE, which has been approved by the nations in the Military Committee Joint Standardization Board, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 2586.

2. AGeoP-08, Edition B, Version 1, is effective upon receipt and supersedes AGeoP-08, Edition A, Version 2, and AGeoP-9, Edition A, Version 1, which shall be destroyed in accordance with the local procedure for the destruction of documents.

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Brigadier General, HUNAF Director, NATO Standardization Office

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS	
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RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]		
DEU	The Bundeswehr Geoinformation Service with the Bundeswehr Geoinformation Center in Euskirchen is the Single Point of Contact for the Provision and Exchange of qualitzassured Geospatial Information for any activities within NATO. Therefore, DEU will implement STANAG 2586 only within the area of responsibility of the Bundeswehr Geoinformation Service.		
FRA	Full implementation of the STANAG will only be possible after 2022 (increment 2 of the GEODE 4D program). Before this date, France will only implement STANAG 2586, Edition 2, within the specifc framework of the provision of national data to NATO as well as for CN/PN exchanges.		
HRV	Croatian MoD will implement STANAG 2586 on a "case by case" basis for interoperability purposes within NATO.		
SVN	SVN will take a step-wise approach to the implementation of this STANAG.		
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Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.			

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CHAPTER 1 INTRODUCTION

1.1. **CONTEXT**

Metadata is essential for dealing with geospatial information (GI). On printed maps the user can find information about the content, its product specification, the currency of the data sources, the producer, the distributor, scale and other relevant data important for the usage of the map. For GI, this metadata has to be provided additionally to the actual data. Digital metadata needs to be structured, i.e. metadata elements, their value types, obligations and multiplicities of occurrences have to be defined.

While metadata has been used in the past to facilitate the interchange of GI, it becomes a core component of the emerging civilian and military spatial data infrastructures. Interoperability of the different components of a Spatial Data Infrastructure (SDI) implies:

- A standard metadata structure;
- Standard interchange mechanisms;
- Well defined vocabularies.

Each SDI remains specific in terms of users, requirements, practices, cultures and policies. If the adoption of standards is a challenge from this perspective, it becomes a necessity when there are requirements to interface different SDI.

The military community is adopting widely the civilian metadata standards (ISO 19115, ISO/TS 19139, ...). However it has been recognized by the Defence community that there are some shortfalls with this standard e.g. Security Constraints.

In the past years, a military general metadata profile has been set up by the Defence Geospatial Information Working Group (DGIWG). This standard is based on this profile.

1.2. **RELATED DOCUMENTS**

Military standards:

- 1. DGIWG Metadata Foundation, 2.0, July 2017
- 2. STANAG 4774 CONFIDENTIALITY METADATA LABEL SYNTAX ADatP-4774 EDITION A

International standards:

- 3. ISO 19115:2003, Geographic information Metadata
- 4. ISO 19115/Cor.1:2006, Geographic information Metadata, Technical Corrigendum 1
- 5. ISO 19115-1:2014, Geographic information Metadata Part 1: Fundamentals
- 6. ISO 19115-2:2009, Geographic information Metadata Part 2: Extensions for imagery and gridded data
- 7. ISO/TS 19115-3:2016, Geographic information Metadata Part 3: XML schema implementation for fundamental concepts

- 8. ISO/TS 19139:2007, Geographic information Metadata XML schema implementation
- 9. ISO 8601:2004, Data elements and interchange formats Information interchange Representation of dates and times
- 10. ISO 639-2:1998, Codes for the representation of names of languages Part 2: Alpha-3 code
- 11. ISO 19106:2004, Geographic Information Profile

Other related documents:

- 12. IETF RFC 3629, UTF-8, a transformation format of ISO 10646
- 13. IETF RFC 3986, Uniform Resource Identifier (URI): Generic Syntax
- 14. IETF RFC 4122, A Universally Unique IDentifier (UUID) URN Namespace
- 15. MC 0296/3 IMS Control Nr: O16005446, dated 25 October 2016
- 16. AC/322-N(2011)0130, GUIDANCE ON THE MARKING OF NATO INFORMATION
- 17. SH/J2/GSP/PN/16-313618 dated 19 MAY 2016 (COS letter) "NAMING OF GEOGRAPHICAL ENTITIES ON ACO MAPS AND PRODUCTS"
- 18. NATO Geospatial Policy MC 296/3, AJP 3.17 Geospatial Support, CoreGIS CONOPS

1.3. ACRONYMS

CRS DGIWG DMF	Coordinate Reference System Defence Geospatial Information Working Group DGIWG Metadata Foundation
GI	Geospatial Information
IETF	The Internet Engineering Task Force
ISO	International Organization for Standardization
NATO	North Atlantic Treaty Organization
NGMP	NATO Geospatial Metadata Profile
RC	Request for Comments
SDI	Spatial Data Infrastructure
SRD	Standards Related Document
STANAG	Standardization Agreement
TS	Technical Specification
URI	Uniform Resource Identifier
URN	Uniform Resource Name
UTF-8	Unicode Transformation Format – 8-bit UUID Universally Unique IDentifier
XML	Extensible Markup Language

CHAPTER 2 NATO GEOSPATIAL METADATA (NORMATIVE)

2.1. SCOPE

This chapter is normative. It defines requirements for the "Geospatial metadata" target as defined in the context (c.f. chapter 1.1).

2.2. DGIWG METADATA FOUNDATION

The DGIWG Metadata Foundation (DMF) is a general Defence metadata profile for datasets, series, services, tiles, documents, products and non-geographic datasets, based on the ISO metadata standards of the ISO 19100 series of standards. In order for NATO metadata to be interoperable with other DGIWG metadata, it should be compliant to DMF.

Requirement 1: a NATO Geospatial Metadata SHALL be compliant to DGIWG Metadata Foundation.

2.3. DGIWG Metadata Foundation in a NATO Environment

This Standards Related Document (SRD) specifies the use of DGIWG Metadata Foundation (DMF) in a NATO Environment (NATO lead operations, exercises or national use).

Requirement 2: a NATO Geospatial Metadata SHALL be compliant to SRD 08.1 – Use of DGIWG Metadata Foundation in a NATO Environment.

2.4. DGIWG Metadata Foundation in a NATO Environment - Codelists

This SRD specifies the content of DGIWG Metadata Foundation (DMF) Codelists in a NATO environment (NATO led operations, exercises or national use).

Requirement 3: a NATO Geospatial Metadata SHALL be compliant to SRD 08.2 – Use of DGIWG Metadata Foundation in a NATO Environment –Codelists.

2.5. Implementation in Shapefile

This SRD specifies the Shapefile implementation of DGIWG Metadata Foundation (DMF) in a NATO environment (NATO led operations, exercises or national use).

Requirement 4: a NATO Geospatial Metadata SHALL be compliant to SRD 08.3 – Implementation in Shapefile.

2.6. NATO SPECIFICATIONS FOR IDENTIFICATION OF HARD COPY LAND MAPS, AERONAUTICAL CHARTS AND IMAGE PLANS

This SRD specifies the rules for naming hardcopy maps, aeronautical charts and image plans in a NATO environment (NATO led operations, exercises or national use). It was formerly referenced as AGeoP-9 Edition A, Version 1 (STANAG 7136).

Requirement 5: a NATO Geospatial Metadata SHALL be compliant to SRD 08.4 – NATO SPECIFICATIONS FOR IDENTIFICATION OF HARD COPY LAND MAPS, AERONAUTICAL CHARTS AND IMAGE PLANS.

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