

World Spatial Metadata Standards

393

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The Netherlands NCGI Metadata

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I. Information about the Metadata Standard Itself

SECTION 0 – Assessment Information

This section provides the user with a general description of the scope and intended use of the standard. Information on the respondent who prepared the assessment is also provided.

0.1 Respondent

Assessment prepared by:

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Date assessment completed:

November 1998, updated November 2000 and May 2002, Reviewed Fall, 2004

Relationship of respondent to standard:

Drafting committee member

0.2 Brief Summary Statement

A. Summary of the scope and intent of the standard:

This standard was developed for the creation of a national clearinghouse in the Netherlands after the proposal of the CEN standard ENV 12657 in 1995 and 1996. The Clearinghouse (and so the standard) became under private ownership in October 1997.

SECTION 1 – Administration of Metadata Standard

This section provides a general description of the administrative framework, within which the standard was developed, tested and currently resides. Significant details are also provided in terms of the developmental and managerial history as well as information on the existence of documentation, software tools and training materials. This section also provides a point of contact for further information on the standard.

1.1 Name of Standard

A. Name of standard:

1. In original language(s):

NCGI Metadata

2. English translation, if appropriate:

B. Version/Edition:

accepted V1.0 Sept. 1996

C. Language(s) of documentation:

**Dutch: “Aansluitdocument Nationaal Clearinghouse
Geo-Informatie”**

D. Acronym(s):

NCGI Metadata

E. Official ID:

N/A

F. Name(s) of recognizing standards authority(ies):

1.2 Responsible Institutions

Contact information about those institutions that are (or were) responsible for the processes involved in the evolution of the standard:

A. Production and/or development:

NCGI (National Clearinghouse Geo-Information)

POB 1442

NL-7301 BR Apeldoorn

Phone: +31 55 528 5869

Fax: +31 55 528 5803

E-mail: clhouse@euronet.nl

Internet: www.ncgi.nl

B. Testing:

see 1.2 A

C. Conformance:

see 1.2 A

D. Maintenance:

see 1.2 A

E. Distribution:

see 1.2 A

1	F. Help Desk/User Support:		1
2	see 1.2 A		2
3			3
4	<i>1.3 Development History</i>		4
5			5
6	A. Beginning of work on metadata standard:		6
7	March 1995. Development by PGB Standards of National LIS-		7
8	council Ravi		8
9	B. Milestones:		9
10	– Initiative group founded in June 1995		10
11	– Development since Sept 1995		11
12	– Testing during the IDEFIX period (predecessor NCGI) in January 1996 until		12
13	end July 1996		13
14	C. Anticipated completion:	N/A	14
15	D. Update cycle:	N/A	15
16			16
17	<i>1.4 Status of the Standard</i>		17
18			18
19	A. Is the standard officially recognized:	YES	19
20	B. Date(s) of recognition:	Sept 1996	20
21	C. Anticipated date of recognition:	N/A	21
22	D. Current stage in recognition process:		22
23	PGB Standards Ravi		23
24	E. Steps still required to achieve recognition:	N/A	24
25			25
26	<i>1.5 Access to Documentation of the Standard</i>		26
27			27
28	A. Is the standard copyrighted?:	NO	28
29	B. Name and address of copyright owner:	N/A	29
30	C. Do restrictions on the use of the standard apply?:	NO	30
31	D. Is the standard documentation currently available?:	YES	31
32	E. List the form/media of standard documentation:		32
33	Paper		33
34	F. Is the standard available on the Internet?:	NO	34
35	G. Price:	Free	35
36	H. Contact details for obtaining the standard:		36
37	Contact NCGI website http://www.ncgi.nl		37
38	I. Does the standard have ISBN/ISSN numbers?:	NO	38
39			39
40	<i>1.6 Available Software Tools</i>		40
41			41
42	A. Is software available to implement the standard as a database?:	YES	42
43	MS-Access application software developed by Civility and in		43
44	Geokey, developed by Geodan		44
45	B. Is software available to test compliance of metadata with the standard?:	YES	45
	software developed by Civility		

1	C. Is software available to produce metadata compliant with the standard?:	YES	1
2	software developed by DLO Staringcentrum, available through		2
3	NCGI		3
4	D. Other relevant software:	NO	4
5	E. Is there a test dataset available to test software tools for implementing the		5
6	standard?:	YES	6
7	developed in MS-Access database		7
8	F. For each product available above, please list contact information:		8
9	See 1.2 A		9
10			10
11	<i>1.7 Available Training Materials</i>		11
12	A. Are organized training sessions available?:	YES	12
13	B. Contact details for training sessions:		13
14	See 1.2 A		14
15	C. Training documentation available:	NO	15
16			16
17	SECTION 2 – Use and Implementation of the Metadata Standard		17
18			18
19	This section provides information on the way in which the standard is used and the purpose		19
20	of its use. It also provides descriptions about the level of abstraction of the standard.		20
21			21
22	<i>2.1 Intended Use of the Standard</i>		22
23	Can the standard be used:		23
24			24
25	A. Within a transfer data structure?:	YES	25
26	B. To produce hardcopy catalog of datasets?:	YES	26
27	C. To catalog data in a digital on-line catalog?:	YES	27
28	D. Other:		28
29	Use of data within the Internet site of NCGI		29
30			30
31	<i>2.2 Intended Purpose of the Standard</i>		31
32	Is the intended purpose of the standard:		32
33			33
34	A. To support discovery, identification, location of data?:	YES	34
35	B. To support how to access data?:	YES	35
36	C. To support the determination of dataset fitness for use?:	YES	36
37	D. To support transfer of dataset?:	YES	37
38	E. To support an organization's data management?:		38
39	Possible, but the standard is developed for data exploration		39
40	F. Other:		40
41	Describes information of the structure of the datasets		41
42			42
43	<i>2.3 Table of Contents</i>		43
44	A. Provide the standard's Table of Contents		44
45	Summary		45

1	1. Introduction	1
2	2. Architecture of NCGI	2
3	3. What to do when joining	3
4	4. At the end	4
5	Annexes	5
6	1. Participants NCGI	6
7	2. Dutch translation of Annex A1 of CEN Metadata standard version Febr.96	7
8	3. Example Cadastre	8
9	4. Example Ministry of Transport and Water control	9
10	5. Example Ministry of Housing, Physical planning and Environment	10
11	6. Example Province Gelderland	11
12	7. Example Central Bureau of Statistics	12
13	8. Example of DLO/Staringcentrum	13
14		14
15	<i>2.4 Level of Abstraction of the Metadata Standard Definition</i>	15
16		16
17	A. Does the standard define metadata elements?:	17
18	For some metadata elements	18
19	B. Does the standard define a model for the relationships between the metadata	19
20	elements?:	NO 20
21	C. Provide an overview diagram of the model of the metadata, if available.	N/A 21
22	D. Does the standard define domains and/or data types of the metadata elements?:	YES 22
23	E. Does the standard define how the metadata should be encoded?:	NO 23
24	F. Does the standard define a database schema for the automatic generation of a	24
25	database?:	NO 25
26	No definition but any database schema can be included	26
27		27
28	<i>2.5 Extensibility of the Standard</i>	28
29		29
30	A. Is the metadata description extensible (e.g., Can user add metadata domains, elements,	30
31	thematic profiles, etc.)?:	NO 31
32		32
33	<i>2.6 Availability of Metadata</i>	33
34	Does the standard specify:	34
35	A. How metadata are to be accessed?:	NO 35
36	B. A mechanism for querying the metadata?:	NO 36
37	C. Particular standardized query protocols?:	NO 37
38	D. That the metadata should be encoded for computer access?:	NO 38
39	E. That the metadata should be encrypted for security?:	NO 39
40		40
41	<i>2.7 Examples</i>	41
42		42
43	A. Does the standard provide examples of implementations?:	YES 43
44	see "Aansluitdocument NCGI"	44
45	B. How many examples are available?:	8 45

SECTION 3 – Linkage and Coordination of the Metadata Standard

This section provides information on how the metadata standard is linked to other standards, particularly transfer standards, and how such linkage is implemented. If a significant linkage does exist, detailed technical information is provided on the precise nature of the linkage to the standard, and how the linkage affects implementation of the metadata standard.

3.1 Associated Transfer Standards

- A. Is the metadata standard associated with a transfer standard(s)?: **NO**
 B. If A is yes, provide references and contact details for each linked standard: **N/A**
 C. If A is yes, are both (all) standards coordinated?: **N/A**
 D. If A is yes, describe how the coordination works, both from a technical and conformance (normative) viewpoint: **N/A**

3.2 Incorporated into transfer mechanism

- A. Is the metadata standard incorporated into a transfer mechanism?: **NO**
 B. If A is yes, provide references and contact details for each incorporated mechanism: **N/A**
 C. If A is yes, describe how: **N/A**

3.3 Other linked, coordinated or associated standards

- A. Is the metadata standard linked, coordinated, or associated with any other standard(s) not listed above?: **YES**
 B. If A is yes, provide references and contact details for each standard:
CEN ENV 12657, Metadata standard
 C. If A is yes, describe how for each relevant standard:
More metadata elements are compulsory as in the CEN Metadata standard ENV 12657, as well as the dataset-ID is compulsory

II. Categories the Metadata Standard Uses to Describe Datasets

The following sections are categories of metadata that may be used by the metadata standard to describe data. Not all categories are relevant to different datasets and may not necessarily be present in the standard. The presence or absence of a category should not be used for judging one standard against another.

Note: For each of the questions in the following sections please provide the obligation status information. Valid obligation values are:

Obligation Level

- M** Mandatory This information must be entered to comply with the metadata standard.
C Conditional This information is entered based on other information in the metadata.
O Optional This information is optionally entered in the metadata.

If the answer is 'NO', the obligation status should be left blank.

SECTION 4 – Dataset Identification

This section examines how the standard provides for the specification of the various sorts of titles and identifiers for a dataset.

4.1 The title(s) of a dataset

Does the standard allow/require the provision for:

Obligation

- A. ☐ Previous title(s)?: **NO**
- B. ☒ Current title(s)?: **YES**
- C. ☐ Possible future title(s)?: **NO**
- D. ☐ Official titles in different languages?: **NO**
- E. ☒ Abbreviated title(s)?: **YES**
- F. ☒ Alternative Title(s)?: **YES**
- G. ☐ Does the standard support effective dates of titles?: **NO**
- H. ☐ Other identifiers (e.g., ISBN, National Stock Number, Uniform Product Code)?: **NO**

4.2 Parties responsible for the dataset

Does the standard allow/require the provision for:

Obligation

- A. ☒ Author?: **YES**
- B. ☒ Owner?: **YES**
- C. ☒ Other?: **YES**

4.3 ISBD Information

Obligation

- A. ☐ Does the metadata standard specify inclusion of mandatory ISBD information (see glossary) within the metadata?: **NO**

SECTION 5 – Status of the Dataset

This section examines how the standard provides for the specification of the current status and updating of the data set.

5.1 Status and Progress of Datasets

Does the metadata standard allow/require the provision for:

Obligation

- A. ☒ Information on the status of the entire dataset?: **YES**
Yes, actual status, future status, starting/end dates of validity, percentage of readiness of the dataset

1	B. __ Information on the status of the particular subset (e.g., observation time,	1
2	inauguration time, extraction time)?:	NO 2
3		3
4	Does the metadata standard specify:	4
5	C. O A structure for updating or maintenance information?:	YES 5
6	D. __ A structure to describe historical information (see also Section 8.3 G)?:	NO 6
7		7
8	<i>5.2 Information on Incremental Updating</i>	8
9	Does the metadata standard specify:	9
10	<i>Obligation</i>	10
11		11
12	A. O A structure for information on incremental updates of the entire dataset?:	YES 12
13	B. __ A structure for information on incremental updates of particular portions of	13
14	the dataset?:	NO 14
15	C. __ A structure to describe the update process for the dataset?:	NO 15
16		16
17	SECTION 6 – Extent of the Dataset	17
18		18
19	This section examines how the standard provides for the specification of the spatial and	19
20	temporal extent of the dataset.	20
21		21
22	<i>6.1 The spatial extent of the dataset</i>	22
23	<i>Obligation</i>	23
24		24
25	A. M Does the metadata standard allow/require for the description of horizontal extent	25
26	(e.g., bounding rectangle/polygon, named location (i.e., Stockholm, etc.))?:	YES 26
27	Yes, bounding box or named location	27
28	B. M Does the metadata standard allow/require for the description of vertical extent (e.g.,	28
29	minima/maxima heights, etc.)?:	YES 29
30	min/max height	30
31	C. __ Does the standard require specific units for describing extent?:	NO 31
32	D. M Does the standard allow specification of the units for describing	32
33	extent?:	YES 33
34	E. M Does the standard require specific spatial reference system for describing	34
35	extent?:	YES 35
36	F. O Does the standard allow specification of the spatial reference system for describing	36
37	extent?:	YES 37
38		38
39	<i>6.2 The temporal extent of the dataset</i>	39
40	<i>Obligation</i>	40
41		41
42	A. M Does the standard allow/require for the description of time period for which	42
43	the dataset is relevant?:	YES 43
44	B. __ Does the standard allow/require specification of the temporal reference	44
45	system?:	NO 45

SECTION 7 – Data Content of the Dataset

This section examines how the standard provides for the specification of the data content of the dataset in terms of overview elements, themes, data definitions and product specifications.

7.1 Dataset overview

Does the standard allow/require for the provision of the following information:

Obligation

- | | |
|---|------------|
| A. M Dataset overview?: | YES |
| B. M Abstract – brief summary of the content of the dataset?: | YES |
| C. M Purpose – summary of the intentions with which the dataset was developed?: | YES |
| D. M Usage – list of activities for which the dataset has been used? (see also Section 8.5): | YES |
| E. M Spatial schema – (e.g., vector, raster)? (see also Section 9): | YES |
| F. M Spatial reference system? (see also Section 12): | YES |
| G. M Language?: | YES |
| H. M Character set (e.g., ISO8859-1, JISX0208)?: | YES |
| I. O List of documents providing further information about the dataset?: | YES |
| J. __ Sample/preview dataset?: | NO |
| K. __ Related datasets?: | NO |
| L. __ Original size of the dataset?: | NO |
| M. __ Compression? (see also Section 11.5): | NO |
| N. __ Other?: | NO |

7.2 Theme(s)

Obligation

- | | |
|--|------------|
| A. O Does the standard allow/require the provision for the description of theme(s) (e.g., topography, land cover, transport, etc.) in the dataset?: | YES |
| B. M If A is yes, does the standard allow the referencing of an outside dictionary or thesaurus?: | YES |
| C. M If A is yes, does the standard itself include a dictionary or thesaurus within the meta-data?: | YES |
| D. O If A is yes, does the standard allow the use of unauthorized user-defined keywords?: | YES |

7.3 Data Definition

Obligation

- | | |
|--|------------|
| A. M Does the standard allow/require the provision for the description of the data definition?: | YES |
| B. If A is yes, does the standard allow/require the provision for the description of: | |
| M 1. Features/Objects?: | YES |

1	M 2. Attributes?:	YES	1
2	M 3. Relations?:	YES	2
3	C. M Can attributes be described separately from feature/object classes?:	YES	3
4	D. O Does the standard allow/require the specification of the domain of the		4
5	attributes?:	YES	5
6	E. __ Does the standard allow/require the specification of data type of the		6
7	attributes?:	NO	7
8	F. O Does the standard allow/require the specification of particular classification		8
9	coding schemes (e.g., FACC, OSKA, S-57 OC)?:	YES	9
10			10
11	<i>7.4 Product Specification</i>		11
12	<i>Obligation</i>		12
13			13
14	A. O Does the standard allow/require for the provision of information about whether the		14
15	dataset meets a particular product specification?:	YES	15
16	B. __ If A is yes, can it be internal to the Metadata?:	NO	16
17	C. O If A is yes, can it be external to the Metadata?:	YES	17
18			18
19	SECTION 8 – Data Quality of the Dataset		19
20			20
21	This section examines how the standard deals with the question of data quality. This in-		21
22	cludes homogeneity and metrics for data quality, quality assurance, and usage.		22
23			23
24	<i>8.1 Overall Data Quality Statement</i>		24
25	<i>Obligation</i>		25
26			26
27	A. M Does the standard allow/require for the provision of quality to be described? If yes,		27
28	please answer the questions below. (If no, all following answers in Section 8 are N/A,		28
29	please skip to Section 9.):	YES	29
30	B. M Does the standard allow/require the provision for the quality information referencing		30
31	an external quality standard, quality assurance standard, or specification?:	YES	31
32			32
33	<i>8.2 Homogeneity of Data Quality</i>		33
34	<i>Obligation</i>		34
35			35
36	A. __ Does the standard allow/require for the variation of the quality of the dataset		36
37	to be described?:	NO	37
38	B. What type of aggregation of quality information is allowed?		38
39	M 1. Entire database?:	YES	39
40	__ 2. Feature/Object instance?:	NO	40
41	O 3. Feature/Object class?:	YES	41
42	__ 4. Attribute instance?:	NO	42
43	O 5. Attribute class?:	YES	43
44	__ 6. Layer?:	NO	44
45	__ 7. Theme?:	NO	45

1	___ 8. Geographic extent?:	NO	1
2	___ 9. Other?:	N/A	2
3			3
4	<i>8.3 Metrics for Data Quality</i>		4
5	Does the standard allow/require the provision of values for:		5
6	<i>Obligation</i>		6
7			7
8	A. Positional accuracy?:		8
9	M 1. Standard error?:	YES	9
10	Yes, as free text		10
11	M 2. Maximum error?:	YES	11
12	Yes, as free text		12
13	M 3. Error correlation?:	YES	13
14	Yes, as free text		14
15	M 4. Confidence level (e.g., 90%, 95%)?:	YES	15
16	Yes, as free text		16
17	5. Other?:	N/A	17
18	B. Attribute accuracy?:		18
19	M 1. Standard error?:	YES	19
20	Yes, as free text		20
21	M 2. Maximum error?:	YES	21
22	Yes, as free text		22
23	M 3. Error frequency?:	YES	23
24	Yes, as free text		24
25	M 4. Error correlation?:	YES	25
26	Yes, as free text		26
27	M 5. Confidence level (e.g., 90%, 95%)?:	YES	27
28	Yes, as free text		28
29	6. Other?:	N/A	29
30	C. Temporal accuracy?:		30
31	M 1. Standard error?:	YES	31
32	Yes, as free text		32
33	M 2. Maximum error?:	YES	33
34	Yes, as free text		34
35	M 3. Error correlation?:	YES	35
36	Yes, as free text		36
37	M 4. Confidence level? (e.g., 90%, 95%)?:	YES	37
38	Yes, as free text		38
39	5. Other?:	N/A	39
40	D. Completeness?:		40
41	M 1. Error of omission?:	YES	41
42	Yes, as free text		42
43	M 2. Error of commission?:	YES	43
44	Yes, as free text		44
45	3. Other?:	N/A	45

1	E. O Currentness?:	YES	1
2	1. Date?:	YES	2
3	2. Maximum age?:	YES	3
4	3. Temporal extent?:	YES	4
5	4. Other?:	NO	5
6	F. M Logical consistency?:	YES	6
7	Yes, as free text		7
8	G. __ Lineage?:		8
9	M 1. List of processing steps?:	YES	9
10	Yes, as free text		10
11	M 2. List of values of processing parameters?:	YES	11
12	Yes, as free text		12
13	M 3. List of printouts of statistics, etc.?:	YES	13
14	Yes, as free text		14
15	M 4. Source material?:	YES	15
16	Yes, as free text		16
17	5. Other?:	N/A	17
18	H. __ Additional Quality Information?:	N/A	18
19			19
20	<i>8.4 Quality Assurance Methods</i>		20
21	Does the standard allow/require the provision of information about the methods used to de-		21
22	termine:		22
23			23
24	<i>Obligation</i>		24
25	A. __ Positional accuracy?:	NO	25
26	1. Standard error in adjustments?:	N/A	26
27	2. Repeated measurements?:	N/A	27
28	3. Independent measurements?:	N/A	28
29	4. Subjective evaluations?:	N/A	29
30	5. Other?:	N/A	30
31	B. __ Attribute accuracy?:	NO	31
32	1. Standard error?:	N/A	32
33	2. Error classification matrix?:	N/A	33
34	3. Independent measurements?:	N/A	34
35	4. Subjective evaluation?:	N/A	35
36	5. Other?:	N/A	36
37	C. __ Temporal accuracy?:	NO	37
38	1. Independent measurements?:	N/A	38
39	2. Subjective evaluation?:	N/A	39
40	3. Other?:	N/A	40
41	D. O Completeness?:	YES	41
42	1. Field checks?:	NO	42
43	2. Repeated measurements?:	NO	43
44	3. Independent measurements?:	NO	44
45	4. Subjective evaluation?:	YES	45

The Netherlands: NCGI Metadata

405

1	5. Error of commission?:	YES	1
2	6. Other?:	NO	2
3	E. ___ Currentness?:	NO	3
4	1. Date of source material?:	N/A	4
5	2. Repeated measurements?:	N/A	5
6	3. Independent measurements?:	N/A	6
7	4. Subjective evaluation?:	N/A	7
8	5. Other?:	N/A	8
9	F. ___ Logical consistency?:	NO	9
10	1. Verification results of consistency checks?:	N/A	10
11	2. Repeated processing?:	N/A	11
12	3. Comparison with independent sources?:	N/A	12
13	4. Subjective evaluation?:	N/A	13
14	5. Other?:	N/A	14
15	G. ___ Lineage?:	NO	15
16	1. Checking results of processing steps:	N/A	16
17	2. Subjective evaluation:	N/A	17
18	3. Other:	N/A	18
19	H. ___ Additional Quality Information?:	NO	19
20			20
21	8.5 Usage		21
22			22
23	<i>Obligation</i>		23
24	A. ___ Does the metadata standard allow/require the provision of information about usage?:		24
25	M 1. Who used it:	YES	25
26	Yes, as free text		26
27	M 2. When it was used:	YES	27
28	Yes, as free text		28
29	M 3. For what application it was used:	YES	29
30	Yes, as free text		30
31	M 4. The effectiveness of use:	YES	31
32	Yes, as free text		32
33	5. Other:	N/A	33
34			34
35	8.6 Alternative Quality Description:	NO	35
36			36
37	SECTION 9 – Spatial Data Structure of the Dataset		37
38			38
39	This section examines how the standard provides for the specification of the spatial data		39
40	model and spatial data types.		40
41			41
42	9.1 Spatial Data Model		42
43	Does the standard allow/require the provision for:		43
44			44
45	<i>Obligation</i>		45

1	A. M The description of the geometrical and/or topological primitives used to	1
2	model the real world?:	YES
3	B. M Information about an external standard for geometrical and/or topological	
4	primitive specification?:	YES
5		
6	<i>9.2 Spatial Data Types</i>	
7	Does the standard allow/require the provision for:	
8		
9	<i>Obligation</i>	
10	A. M Information about the spatial data type(s) used in the dataset?:	YES
11	B. M If A is yes, which of the following generic spatial data types are supported? YES	
12	For each, please list specific data primitive levels supported by each data type.	
13	M 1. Vector (e.g., spaghetti, chain-node/node-edge-face, planar graph, full	
14	topology)?:	YES
15	M 2. Areal Raster (e.g., thematic raster – scanned and classification maps, image raster	
16	– satellite images, scanned aerial photographs)?:	YES
17	M 3. Grid/Matrix (e.g., Digital Elevation Model)?:	YES
18	M 4. Triangular Irregular Network (TIN)?:	YES
19	5. Other?:	N/A
20		
21	<i>9.3 Other Data Types</i>	
22	Does the standard allow the provision of information about:	
23		
24	<i>Obligation</i>	
25	A. <input type="checkbox"/> Video?:	NO
26	B. <input type="checkbox"/> Sound?:	NO
27	C. <input type="checkbox"/> Other?:	N/A
28		
29	SECTION 10 – Spatial Reference of the Dataset	
30		
31	This section examines how the dataset provides for the specification of the spatial reference	
32	characteristics of the data set.	
33	Does the standard allow/require the provision for the following information:	
34		
35		
36	<i>10.1 Geoidal Model</i>	
37	<i>Obligation</i>	
38		
39	A. M Geoidal model name?:	YES
40	B. M Geoidal model definitions?:	YES
41		
42	<i>10.2 Geodetic datum</i>	
43	<i>Obligation</i>	
44		
45	A. M Geodetic datum name?:	YES

The Netherlands: NCGI Metadata

407

1	B. <input type="checkbox"/> Geodetic datum definitions?:	NO	1
2	No, is externally defined		2
3			3
4	<i>10.3 Reference Ellipsoid</i>		4
5			5
6	<i>Obligation</i>		6
7	A. <input checked="" type="checkbox"/> Reference ellipsoid name?:	YES	7
8	B. <input type="checkbox"/> Reference ellipsoid definitions?:	NO	8
9	No, is externally defined		9
10			10
11	<i>10.4 Projection</i>		11
12			12
13	<i>Obligation</i>		13
14	A. <input checked="" type="checkbox"/> Projection name?:	YES	14
15	B. <input type="checkbox"/> Projection definitions?:	YES	15
16	Yes, by parameters		16
17			17
18			18
19	<i>10.5 Coordinate Systems</i>		19
20			20
21	<i>Obligation</i>		21
22	A. <input checked="" type="checkbox"/> Coordinate system type?:	YES	22
23	B. <input type="checkbox"/> Coordinate system definitions?:	NO	23
24	No, is externally defined		24
25			25
26	<i>10.6 Height Reference System</i>		26
27			27
28	<i>Obligation</i>		28
29	A. <input checked="" type="checkbox"/> Vertical datum name?:	YES	29
30	B. <input type="checkbox"/> Types of heights?:	NO	30
31			31
32	<i>10.7 Ancillary Geodetic Information</i>		32
33			33
34	<i>Obligation</i>		34
35			35
36	A. <input type="checkbox"/> Does the standard allow/require the provision for ancillary geodetic, gravimetric,		36
37	or magnetometric information?:	NO	37
38			38
39	<i>10.8 Transformation Parameters</i>		39
40	Does the standard specify a method to provide information for coordinate transformation(s):		40
41			41
42	<i>Obligation</i>		42
43	A. <input type="checkbox"/> Model name?:	NO	43
44	B. <input type="checkbox"/> Control points?:	NO	44
45	C. <input type="checkbox"/> Transformation parameters?:	NO	45

1	<i>10.9 Non-Coordinate Spatial Reference</i>	1
2	Does the standard allow/require the provision for information on non-coordinate spatial ref-	2
3	erence systems (e.g., postal systems, street address)?:	3
4		4
5	<i>Obligation</i>	5
6	A. M Reference system name?:	YES 6
7	B. __ Reference system definitions?:	NO 7
8	C. __ Other?:	NO 8
9		9
10	SECTION 11 – Availability and Distribution of the Dataset	10
11		11
12	This section examines how the standard provides information on the availability of the	12
13	dataset?	13
14	Does the standard allow/require the provision for:	14
15		15
16	<i>11.1 The Distributor(s) of the Dataset</i>	16
17		17
18	<i>Obligation</i>	18
19	A. M Information about the distributor(s) of the dataset?:	YES 19
20	B. M Contact information for the distributor(s)?:	YES 20
21		21
22	<i>11.2 Restrictions to Access and Usage</i>	22
23		23
24	<i>Obligation</i>	24
25	A. M Information about copyright on the dataset (e.g., date, period, copyright owner,	25
26	etc.)?:	YES 26
27	B. M Information about restrictions on the access of the dataset?:	YES 27
28	C. O Information about restrictions on the usage of the dataset?:	YES 28
29		29
30	<i>11.3 Pricing Details</i>	30
31		31
32	<i>Obligation</i>	32
33	A. M Information about pricing?:	YES 33
34		34
35	<i>11.4 Distribution of the Dataset</i>	35
36		36
37	<i>Obligation</i>	37
38	A. M Information about distribution media?:	YES 38
39	B. M Information about on-line access?:	YES 39
40	C. M Information about units of distribution (e.g., tiles, layers, polygons,	40
41	elements)?:	YES 41
42		42
43	<i>11.5 Distribution Format</i>	43
44		44
45	<i>Obligation</i>	45

1	A. M Information about distribution formats (e.g., commercial CAD format, commercial	1
2	GIS formats, National/International transfer standard)?:	YES
3	B. __ Information about the encoding of the dataset (e.g. binary, ASCII)?:	NO
4	C. __ Information about compression method?:	NO
5	D. __ Information about compressed dataset size?:	NO
6	E. __ Information about the distribution mechanism?:	NO
7	F. __ Information about the encapsulation of data (e.g., ISO 8211, ISO 8824)?:	NO
8		
9	<i>11.6 Ordering Procedures</i>	
10		
11	<i>Obligation</i>	
12	A. M Information about ordering procedures for the dataset?:	YES
13		
14	<i>11.7 Support Services</i>	
15		
16	<i>Obligation</i>	
17	A. M Information about support services (e.g., additional data transformations, format	
18	or coordinate conversions)?:	YES
19		
20	SECTION 12 – Authorization and Verification of the Metadata	
21		
22	This section examines how the standard provides for the description of the authorization	
23	and verification on the metadata of a dataset (e.g., how is the metadata itself authorized and	
24	verified?).	
25		
26	<i>12.1 Metadata reference</i>	
27		
28	<i>Obligation</i>	
29	A. M Does the standard allow/require the provision of information about reference dates	
30	of the metadata (e.g., last check date, last update date, review date)?:	YES
31		
32		
33	<i>12.2 Verification Authority</i>	
34	<i>Obligation</i>	
35		
36	A. __ Does the standard allow/require the provision for information about who	
37	verified/authorized the metadata?:	NO
38	B. __ Does the standard specify the method for providing this information (e.g., ISO	
39	9000):	NO
40		
41	<i>12.3 Statistical Methods Used for Verification</i>	
42	<i>Obligation</i>	
43		
44	A. __ Does the standard specify the statistical methods to be used for verification of	
45	the metadata?:	NO

410

H.J.G.L. Alders

1 B. __ Does the standard allow/require the provision for the description of the
2 statistical methods used to verify the metadata?:

NO

3
4 ***END OF CHARACTERISTICS***
5 ***FIN***

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