# GILS Data Elements and Corresponding USMARC Tags—Continued

GILS Data Element	USMARC Tag
Cost Information	037\$n
Technical Prerequisites	538\$a
Available Time Period	
Available Time Structured	045\$b
Available Time Textual	513\$b
Available Linkage	
Linkage Type	856\$q
Linkage	856\$u
Sources of Data	786\$n
Methodology	567\$a
Access Constraints	506\$a
General Access Constraints	506\$a
Originator Dissemination	357\$g
Control	
Security Classification Control	355\$a
Use Constraints	540\$a
Point of Contact	if no subfields 270\$z, otherwise 270 1st Indicator = 2
Contact Name	270\$p
Contact Organization	270\$q
Contact Street Address	270\$a
Contact City	270\$b
Contact State or Province	270\$c
Contact Zip or Postal Code	270\$e
Contact Country	270\$d
Contact Network Address	270\$m
Contact Hours of Service	270\$r
Contact Telephone	270\$k
Contact Fax	270\$1
Supplemental Information	500\$a
Purpose	521\$a
Agency Program	545\$a
Cross Reference	787\$n
Cross Reference Title	787\$t
Cross Reference Relationship	787\$n 1st indicator = 0
Cross Reference Linkage	
Linkage Type	787\$h
Linkage	787\$o
Schedule Number	583\$b
Control Identifier	001
Original Control Identifier	035\$a
Record Source	040\$a
Language of Record	040\$b
Date of Last Modification	005
Record Review Date	583\$c

## **USMARC Tags and Field Names (from USMARC Format for Bibliographic Data)**

\*Where name for field and subfield are the same, only the subfield name is given.

USMARC Tag	<u>Subfield</u>	<u>Field Name</u>
001		Control Number
005		Date and Time of Latest Transaction
034		Coded Cartographic Mathematical Data
034	\$d	Coordinates—westernmost longitude
034	\$e	Coordinates—easternmost longitude
034	<b>\$</b> f	Coordinates—northernmost latitude
034	\$g	Coordinates—southernmost latitude
035	\$a	System Control Number
037		Source of Acquisition
037	\$c	Terms of availability
037	\$f	Form of issue
037	\$n	Note
040		Cataloging Source
040	\$a	Original cataloging agency
040	<b>\$</b> b	Language of cataloging
041	\$a	Code-language
042	\$a	Authentication Code
045	<b>\$</b> b	Time Period-Structured
245		Title Statement
245	\$a	Title
255		Cartographic Mathematical Data
255	\$c	Statement of coordinates
260	\$a	Place of Publication
260	<b>\$</b> b	Publication, Distribution, etc.—Name of publisher,
		distribution etc.
260	\$c	Date of Publication
270		Address
270	1st Indicator	Type of address
270	\$a	Address
270	<b>\$</b> b	City
270	\$c	State or province
270	<b>\$</b> d	Country
270	\$e	Postal code
270	\$k	Telephone number
270	<b>\$</b> I	Fax number
270	\$m	Electronic mail address
270	<b>\$</b> p	Contact person
270	<b>\$</b> q	Title of contact person
270	\$r	Hours
270	\$z	Address/Public Note
355	\$a	Security Classification Control
357		Originator Dissemination Control
357	\$g	Other restrictions

# **USMARC Tags and Field Names (from USMARC Format for Bibliographic Data)**

USMARC Tag	<u>Subfield</u>	<u>Field Name</u>
500	\$a	General Note
506	Ψ	Restrictions on Access Note
506	\$a	Terms governing access
513	•	Type of Report and Period Covered Note
513	<b>\$</b> b	Period covered
520	\$a	Summary, Etc. Note
521	\$a	Target Audience Note
538	\$a	System Details Note
540	\$a	Terms Governing Use and Reproduction Note
545	\$a	Biographical or Historical Note
567	\$a	Methodology Note
583		Action Note
583	\$b	Action identification
583	\$c	Time of action
650		Subject Added Entry—Topical Term
650		1st indicator Level of subject
650	\$2	Source of heading or term
650	\$a	Topical term or geographic name as entry element
651		Subject Added Entry—Geographic Name
651	\$2	Source of heading or term
651	\$a	Topical term or geographic name as entry element
653		Index Term—Uncontrolled
653	\$a	Uncontrolled term
655	\$a	Index Term—Genre/Form
710		Added Entry—Corporate Name
710	\$a	Name
720		Added Entry—Uncontrolled Name
720	\$a	Name
765		Original language (when indicated by value of Cross Reference Relationship)
767		Translation (when indicated by value of Cross Reference Relationship)
770		Supplement/special issue (when indicated by value of Cross Reference Relationship)
772		Parent (when item is a supplement as indicated by value of Cross Reference Relationship)
773		Host item (when item is a part as indicated by value of Cross Reference Relationship)
774		Component item (when indicated by value of Cross Reference Relationship)
775		Other edition (when indicated by value of Cross Reference Relationship)

## **USMARC Tags and Field Names (from USMARC Format for Bibliographic Data)**

USMARC Tag	<u>Subfield</u>	<u>Field Name</u>
776		Additional physical form (when indicated by value of Cross Reference Relationship)
777		Issued with (when indicated by value of Cross Reference Relationship)
780		Preceding entry (when indicated by value of Cross Reference Relationship)
785		Succeeding entry (when indicated by value of Cross Reference Relationship)
786		Data Source Entry
786	\$n	Note
787		Nonspecific Relationship Entry
787	\$h	Nonspecific Relationship Entry-Physical description
787	\$n	Nonspecific Relationship Entry-Note
787	\$o	Nonspecific Relationship Entry-Other identifier
787	\$t	Title
787	\$w	Record Control Number
856		Electronic Location and Access
856	\$q	Electronic Location and Access—File transfer mode
856	\$u	Uniform Resource Locator
856	\$z	Public note

#### ANNEX C—PREFERRED DISPLAY FORMAT FOR GILS RECORDS

GILS servers will transfer records in three record syntaxes:

- USMARC
- Generic Record Syntax (GRS)
- Simple Unstructured Text Record Syntax (SUTRS).

In SUTRS, the formatting of the record contents is handled by the server, and the client receives a record devoid of structure. In USMARC and GRS, the record, whose structure is defined by the record syntax, is passed from the target to an orgin, and the client software has more flexibility in processing the record contents for display.

The recommended guidelines in this Annex describe how records should be displayed, whether formatted by the server or the client (but this does not preclude display formats in addition to the Preferred Display Format).

### **Record Organization**

The record should be organized so that the elements first viewed by the user provide adequate information to either choose or eliminate the record from further consideration. These elements are: Title, Originator, Contributor, Date of Publication, Place of Publication, Language of Resource, Abstract, Controlled Subject Index, and Subject Terms Uncontrolled.

Next in the order of presentation are elements that give detailed information about the information resource being described: Spatial Domain, Time Period, Availability, Sources of Data, Methodology, Access Constraints, Use Constraints, Point of Contact, and Supplemental Information.

The elements describing the reason for the existence of the data are next: Purpose and Agency Program.

Related information resources are listed next in the element: Cross Reference.

The final elements provide bibliographic control information: Schedule Number, Control Identifier, Original Control Identifier, Record Source, Language of Record, Date of Last Modification, and Record Review Date.

#### General Instructions for Formatting Full Element Set Name Records

All displayable elements are to be labelled with the full title of the field followed by a colon. Label mnemonics should only be used in situations where the user can ask for an explanation of the mnemonic. Mnemonics should not be used in SUTRS records, since it should be assumed that the client knows nothing about the server and is incapable of interpreting the mnemonics.

The subelements of constructed elements (i.e., locally defined fields, Availability, Spatial Domain, etc.) should be indented to reflect their association and structure within a well-structured element. Labels on subelements can eliminate the redundant leading parts (e.g., the word Available on the Availability subelements).

In the Controlled Subject Index element, the Subject Thesaurus subelement can be presented in parentheses, followed by the Subject Terms. Multiple Subject Terms should be separated by a semi-colon and a space (e.g., Controlled Subject Index (MeSH): Kidney; Kidney Disease). Alternatively, the Subject

Thesaurus and Subject Terms can be indented under the Controlled Subject Index label, as is done with the other well-structured fields. Uncontrolled Subject Terms should be separated by a semi-colon and a space.

#### Display Format for Brief Element Set Name Records

Brief Records consist of the Title, Control Identifier, Originator, and Local Control Number fields. For display purposes, the Control Identifier and Local Control Number can be omitted. Brief Records may be formatted to fit on a single line. This may require that one or both of the displayed fields will be truncated. Truncation can be indicated with elipsis (. . . ).

### Display Format for G Element Set Name Records

G Records consist of Brief Record elements and additionally, the Cross Reference element. For display purposes, the guidelines for Full Records should be followed.

#### ANNEX D—GILS SCHEMA

The GILS Schema defines a set of numeric tags for use with the Generic Record Syntax (GRS). The GILS Schema defines a GILS tagSet that associates a numeric tag with one or more GILS Core Elements.

Some GILS Core elements correspond to tags already defined in tagSet-M and tagSet-G, and these tags are used to identify GILS Core elements in the Abstract Record Structure. When the tagType is 1, the tag value is from tagSet-M. When the tagType is 2, the tag value is from tagSet-G. When the tagType is 3, the tag value is an arbitrary string tag. When the tagType is 4, the tag value is from the GILS tagSet.

There are two general classes of schema elements in the GILS Schema:

- 1) Primitive—these elements cannot have locally defined subelements
- Constructed—these elements have one or more subelements any of which may be well-defined or target-defined; in the latter case, these locally defined subelements are identified with string tags

This Annex first presents the GILS tagSet that identifies the element, its unique tag, and a recommended datatype. This is followed by the GILS Abstract Record Structure that shows the full tag path for each element.

### **GILS tagSet**

<u>Tag</u>	<u>Element</u>	Recommended Datatype
1	controlldentifier	InternationalString
2	streetAddress	InternationalString
3	city	InternationalString
4	stateOrProvince	InternationalString
5	zipOrPostal Code	InternationalString
6	hoursOfService	InternationalString
7	resourceDescription	InternationalString
8	technicalPrerequisites	InternationalString
9	westBoundingCoordinate	intUnit
10	eastBoundingCoordinate	intUnit
11	northBoundingCoordinate	intUnit
12	southBoundingCoordinate	intUnit
13	placeKeyword	InternationalString
14	placeKeywordThesaurus	InternationalString
15	beginningDate	GeneralizedTime
16	timePeriodTextual	InternationalString
17	linkage	InternationalString
18	linkageType	InternationalString
19	recordSource	InternationalString
20	controlledTerm	InternationalString
21	subjectThesaurus	InternationalString
22	uncontrolledTerm	InternationalString
23	originalControlldentifier	InternationalString
24	recordReviewDate	GeneralizedTime
25	generalAcessConstraints	IntemationalString
26	originatorDisseminationControl	IntemationalString
27	securityClassificationControl	IntemationalString
28	orderInformation	IntemationalString
29	cost	Boolean

### GILS tagSet—Continued

<u>Tag</u>	<u>Element</u>	Recommended Datatype
30	costInformation	IntemationalString
31	scheduleNumber	IntemationalString
32	languageOfResource	IntemationalString
33	medium	IntemationalString
34	languageOfRecord	IntemationalString
35	relationship	IntemationalString
36	endingDate	GeneralizedTime

NOTE: The element "wellKnown" from tagSet-M (1,19) and referred to below has the following definition: When an element is defined to be "structured into locally defined elements," the target may use this tag (i.e., wellKnown) in lieu of, or along with, locally defined tags. For example, an element named 'title' might be described to be "locally structured." The target might present the element structured into the following subelements: 'wellKnown,' 'spineTitle,' and 'variantTitle,' where the latter two tags are target defined. In this case, 'wellKnown' is assumed to mean 'title'.

51	purpose Constructed as follows— This element may include the element wellKnown and may also include locally defined elements.
52	originator Constructed as follows—  This element may include the element wellKnown and may also include locally defined elements.
53	accessConstraints Constructed as follows— This element may include the element wellKnown and any of the following as well as locally defined elements: generalAccessConstraints, originatorDisseminationControl, securityClassificationControl.
54	useConstraints Constructed as follows—  This element may include the element wellKnown and may also include locally defined elements.
55	orderProcess Constructed as follows— This element may include the element wellKnown and any of the following as well as locally defined elements: orderInformation, cost, costInformation.
56	agencyProgram Constructed as follows—  This element may include the element wellKnown and may also include locally defined elements.
57	sourcesOfData Constructed as follows—  This element may include the element wellKnown and may also include locally defined elements.
58	methodology Constructed as follows—  This element may include the element wellKnown and may also include locally defined elements.
59	supplementalInformation Constructed as follows—  This element may include the element wellKnown and may also include locally defined elements.
70	availability Constructed as follows—  This element may include any of the following as well as locally defined elements: medium, distributor, resourceDescription, orderProcess, technicalPrerequisites,

timePeriod, availableLinkage.

## GILS tagSet—Continued

<u>Tag</u>	<u>Element</u>	Recommended Datatype
71	spatialDomain  This element may include any of the boundingCoordinates, place.	Constructed as follows— following as well as locally defined elements:
90	locally defined elements: name, organ	Constructed as follows— wellKnown and any of the following as well as nization, streetAddress, city, stateOrProvince, dress, hoursOfService, telephone, fax.
91		Constructed as follows— following as well as locally defined elements: ingCoordinate, northBoundingCoordinate,
92	place This element may include any of the financeKeyword, placeKeywordThesaur	Constructed as follows—following as well as locally defined elements: rus.
93	timePeriod  This element may include any of the timePeriodTextual, timePeriodStructur	Constructed as follows— following as well as locally defined elements: ed.
94	locally defined elements: name, organ	Constructed as follows— wellKnown and any of the following as well as nization, streetAddress, city, stateOrProvince, dress, hoursOfService, telephone, fax.
95	controlledSubjectIndex This element may include any of the SubjectThesaurus, subjectTermsCont	Constructed as follows— following as well as locally defined elements: rolled.
96	subjectTermsControlled This element may include the following trolledTerm.	Constructed as follows— ng as well as locally defined elements: con-
97	SubjectTermsUncontrolled  This element may include the following trolledTerm.	Constructed as follows— ag as well as locally defined elements: uncon-
98	crossReference This element may include any of the title, relationship, crossReferencelinka	Constructed as follows— following as well as locally defined elements: age.
99	availableLinkage This element may include any of the linkage, linkageType.	Constructed as follows— following as well as locally defined elements:
100	crossReferenceLinkage This element may include any of the linkage, linkageType.	(Constructed as follows) following as well as locally defined elements:
101	timePeriodStructured This element may include any of the fo	(Constructed as follows) llowing elements: beginningDate, endingDate.
102	availableTimeStructured This element may include any of the fo	(Constructed as follows) llowing elements: beginningDate, endingDate.

### **GILS Abstract Record Structure**

NOTE: The element "bodyOfDisplay" in tagSet-G (2,9) may be used by the target to combine into this single element (i.e., bodyOfDisplay) one or more of the elements from the following abstract record structure into a display format, for display.

<u>Tag</u> path	Element:Repeatable/Not Repeatable
(1,10)	rank: Not Repeatable
(1,12)	url: Not Repeatable
(1,14)	localControlNumber: Not Repeatable
(2,1)	title: Not Repeatable
(4,52)	originator: Repeatable
(2,2)	contributor: Repeatable
(2,4)	dateOfPublication: Not Repeatable
(2,3)	placeOfPublication: Not Repeatable
(4,32)	languageOfResource: Repeatable
(2,6)	abstract: Not Repeatable
(4,95)	controlledSubjectIndex: Repeatable
(4,95)/(4,21)	subjectThesaurus: Not Repeatable
(4,95)/(4,96)	subjectTermsControlled: Not Repeatable
(4,95)/(4,96)/(4,20)	controlledTerm: Repeatable
(4,97)	subjectTermsUncontrolled: Not Repeatable
(4,97)/(4,22)	uncontrolledTerm: Repeatable
(4,71)	spatialDomain: Not Repeatable
(4,71)/(4,91)	boundingCoordinates: Not Repeatable
(4,71)/(4,91)/(4,9)	westBoundingCoordinate: Not Repeatable
(4,71)/(4,91)/(4,10)	eastBoundingCoordinate: Not Repeatable
(4,71)/(4,91)/(4,11)	northBoundingCoordinate: Not Repeatable
(4,71)/(4,91)/(4,12)	southBoundingCoordinate: Not Repeatable
(4,71)/(4,92)	place: Repeatable
(4,71)/(4,92)/(4,14)	placeKeywordThesaurus: Not Repeatable
(4,71)/(4,92)/(4,13)	placeKeyword: Repeatable
(4,93)	timePeriod: Repeatable
(4,93)/(4,16)	timePeriodTextual: Not Repeatable
(4,93)/(4,101)	timePeriodStructured: Repeatable
(4,93)/(4,101)/(4,15)	beginningDate: Not Repeatable
(4,93)/(4,101)/(4,36)	endingDate: Not Repeatable
(4,70)	availability: Repeatable
(4,70)/(4,33)	medium: Not Repeatable
(4,70)/(4,90)	distributor: Not Repeatable
(4,70)/(4,90)/(2,7)	distributorName: Not Repeatable
(4,70)/(4,90)/(2,10)	distributorOrganization: Not Repeatable
(4,70)/(4,90)/(4,2)	distributorStreetAddress: Not Repeatable
(4,70)/(4,90)/(4,3)	distributorCity: Not Repeatable
(4,70)/(4,90)/(4,4)	distributorStateOrProvince: Not Repeatable
(4,70)/(4,90)/(4,5)	distributorZipOrPostalCode: Not Repeatable
(4,70)/(4,90)/(2,16)	distributorCountry: Not Repeatable

## GILS Abstract Record Structure—Continued

<u>Tag</u> <u>E</u> <u>path</u>	Element:Repeatable/Not Repeatable
(4,70)/(4,90)/(2,12) (4,70)/(4,90)/(4,6)	distributorNetworkAddress: Repeatable distributorHoursOfService: Repeatable
(4,70)/(4,90)/(2,14)	distributorTelephone: Repeatable
(4,70)/(4,90)/(2,15)	distributorFax: Repeatable
(4,70)/(4,7)	resourceDescription: Repeatable
(4,70)/(4,55)	orderProcess: Not Repeatable
(4,70)/(4,55)/(4,28)	orderInformation: Not Repeatable
(4,70)/(4,55)/(4,29)	cost: Not Repeatable
(4,70)/(4,55)/(4,30)	costInformation: Not Repeatable
(4,70)/(4,8)	technicalPrerequisites: Not Repeatable
(4,70)/(4,93)	availableTimePeriod: Repeatable
(4,70)/(4,93)/(4,16)	availableTimeTextual: Not Repeatable
(4,70)/(4,93)/(4,102)	availableTimeStructured: Repeatable
(4,70)/(4,93)/(4,102/(4,15)	beginningDate: Not Repeatable
(4,70)/(4,93)/(4,102)/(4,36)	availableTimePeriod: Repeatable
(4,70)/(4,99)	availableLinkage: Repeatable
(4,70)/(4,99)/(4,18)	linkageType: Not Repeatable
(4,70)/(4,99)/(4,17)	linkage: Repeatable
(4,57)	sourcesOfData: Not Repeatable
(4,58)	methodology: Not Repeatable
(4,53)	accessConstraints: Not Repeatable
(4,53)/(4,25)	generalAccessConstraints: Not Repeatable
(4,53)/(4,26)	originatorDisseminationControl: Not Repeatable
(4,53)/(4,27)	securityClassificationControl: Not Repeatable
(4,54)	useConstraints: Not Repeatable
(4,94)	pointOfContact: Not Repeatable
(4,94)/(2,7)	contactName: Not Repeatable
(4,94)/(2,10)	contactOrganization: Not Repeatable
(4,94)/(4,2)	contactStreetAddress: Not Repeatable
(4,94)/(4,3)	contactCity: Not Repeatable
(4,94)/(4,4)	contactStateOrProvince: Not Repeatable
(4,94)/(4,5)	contactZipOrPostalCode: Not Repeatable
(4,94)/(2,16)	contactCountry: Not Repeatable
(4,94)/(2,12)	contactNetworkAddress: Repeatable
(4,94)/(4,6)	contactHoursOfService: Repeatable
(4,94)/(2,14)	contactTelephone: Repeatable
(4,94)/(2,15)	contactFax: Repeatable
(4,59)	supplementalInformation: Not Repeatable
(4,51)	purpose: Not Repeatable
(4,56)	agencyProgram: Not Repeatable
(4,98)	crossReference: Repeatable
(4,98)/(2,1)	crossReferenceTitle: Not Repeatable

## GILS Abstract Record Structure—Continued

<u>Tag</u> path	Element:Repeatable/Not Repeatable
(4,98)/(4,35) (4,98)/(4,100) (4,98)/(4,100)/(4,18) (4,98)/(4,100)/(4,17) (4,31) (4,1) (4,23) (4,19) (4,34) (1,16) (4,24)	crossReferenceRelationship: Repeatable crossReferenceLinkage: Repeatable linkageType: Not Repeatable linkage: Repeatable scheduleNumber: Not Repeatable controlldentifier: Not Repeatable originalControlldentifier: Not Repeatable recordSource: Not Repeatable languageOfRecord: Not Repeatable dateOfLastModification: Not Repeatable recordReviewDate: Not Repeatable

#### ANNEX E—GILS CORE ELEMENTS

Definitions of GILS Core Elements and their usual structure are here made part of the GILS Application Profile. Guidelines on customary usage, such as the wording of specific elements and which elements are regarded as mandatory in specific contexts, may be found in separate documents. For example, the U.S. National Archives and Records Administration publishes for U.S. Federal agencies the document "Guidelines for the Preparation of GILS Core Entries." available in HTML format at:

http://www.dtic.mil/gils/documents/naradoc/

Implementors are reminded that in addition to the well-known GILS Core Elements, GILS locator records may contain any number of locally-defined elements. Some such elements may be well-known in the context of other Z39.50 profiles (e.g., WAIS, GEO) also supported by a particular GILS-compliant server.

**TITLE** (Not Repeatable) This element conveys the most significant aspects of the referenced resource and is intended for initial presentation to users independently of other elements. It should provide sufficient information to allow users to make an initial decision on likely relevance. It should convey the most significant information available, including the general topic area, as well as a specific reference to the subject.

**ORIGINATOR** (Repeatable) This element identifies the information resource originator.

**CONTRIBUTOR** (Repeatable) This element is used if there are names associated with the resource in addition to the Orginator, such as personal author, corporate author, co-author, or a conference or meeting name.

**DATE OF PUBLICATION** (Not Repeatable) The discrete creation date in which the described resource was published or updated, though not for use on resources that are published continuously such as dynamic databases. Date of Publication Textual may also provide additional information such as when the resource was originally published. This element may be expressed in one of two forms:

- **Date Of Publication Structured** Date described using the ISO 8601 prescribed structure (fixed 8 characters, YYYYMMDD).
- Date Of Publication Textual Date described textually.

**PLACE OF PUBLICATION** (Not Repeatable) The city or town where the described resource was published. May also include country if location of city is not well known.

**LANGUAGE OF RESOURCE** (Repeatable) This element indicates the language(s) of the described resource as represented by the MARC three character alpha code. If a resource is multilingual, repeat this element for each applicable language.

**ABSTRACT** (Not Repeatable) This element presents a narrative description of the information resource. This narrative should provide enough general information to allow the user to determine if the information resource has sufficient potential to warrant contacting the provider for further information.

**CONTROLLED SUBJECT INDEX** (Repeatable) This element is a grouping of subelements that together provide any controlled vocabulary used to describe the resource and the source of that controlled vocabulary:

Subject Thesaurus (Not Repeatable) This subelement provides the reference to a formally
registered thesaurus or similar authoritative source of the controlled index terms. Notes on how
to obtain electronic access to (e.g., a URI) or copies of the referenced source should be provided,
possibly through a Cross Reference to another locator record that more fully describes the
referenced resource and its potential application to locating information.

- Subject Terms Controlled (Not Repeatable) This subelement is a grouping of descriptive terms drawn from a controlled vocabulary source to aid users in locating entries of potential interest. Each term is provided in the subordinate repeating field:
  - Controlled Term
- Subject Terms Uncontrolled (Not Repeatable) This element is a grouping of descriptive terms
  to aid users in locating resources of potential interest, but the terms are not drawn from a formally
  registered controlled vocabulary source. Each term is provided in the repeating subelement:
  - Uncontrolled Term

**SPATIAL DOMAIN** (Not Repeatable) This element is a grouping of subelements that together provide the geographic areal domain of the data set or information resource. Geographic names and coordinates can be used to define the bounds of coverage. Although described here informally, the spatial object constructs should be as defined in FIPS 173, "Spatial Data Transfer Standard."

**BOUNDING COORDINATES** (Not Repeatable) This subelement limits the coverage of a data set expressed by latitude and longitude values in the order western-most, eastern-most, northern-most, and southern-most. For data sets that include a complete band of latitude around the earth, the West Bounding Coordinate shall be assigned the value: 180.0. The following subelements comprise the Bounding Coordinates:

 West Bounding Coordinate Western-most coordinate of the limit of the coverage expressed in longitude.

Domain:  $-180.0 \le \text{West Bounding Coordinate} \le 180.0$ 

• East Bounding Coordinate Eastern-most coordinate of the limit of coverage expresses in longitude.

Domain: −180.0 ≤ East Bounding Coordinate ≤ 180.0

 North Bounding Coordinate Northern-most coordinate of the limit of coverage expressed in latitude.

Domain:  $-90.0 \le \text{North Bounding Coordinate} \le 90.0$ ;

North Bounding Coordinate ≥ South Bounding Coordinate

 South Bounding Coordinate Southern-most coordinate of the limit of coverage expressed in latitude.

Domain:  $-90.0 \le$  South Bounding Coordinate  $\le 90.0$ ;

South Bounding Coordinate ≤ North Bounding Coordinate

**PLACE** (Repeatable) This subelement identifies geographic locations characterized by the data set or information resource through two associated constructs:

- Place Keyword Thesaurus (Not Repeatable) The name of a formally registered thesaurus or similar authoritative source of Place Keywords. Each keyword is provided in the subordinate repeating field:
- Place Keyword (Repeatable) The geographic name of a location covered by a data set or information resource.

**TIME PERIOD** (Repeatable) This element provides time frames associated with the information resource. One or both of the following forms may be used:

- Time Period Textual (Not Repeatable) Time described textually.
- **Time Period Structured** (Repeatable) This form is a grouping of date subelements which are used together to indicate a range.
  - Beginning Date (Not Repeatable)
  - Ending Date (Not Repeatable)

**AVAILABILITY** (Repeatable) This element is a grouping of subelements that together describe how the information resource is made available.

**Medium** (Not Repeatable) A description of the material type of the resource, e.g. cassette, kit, computer database, computer file. It implies the use of a well-known list of medium types.

**Distributor** (Not Repeatable) This subelement consists of the following subordinate fields that provide information about the distributor:

- Distributor Name
- Distributor Organization
- Distributor Street Address
- Distributor City
- Distributor State or Province
- Distributor Zip or Postal Code
- Distributor Country
- Distributor Network Address
- Distributor Hours of Service
- Distributor Telephone
- Distributor Fax

**RESOURCE DESCRIPTION** (Repeatable) This subelement identifies the resource as it is known to the distributor.

**ORDER PROCESS** (Not Repeatable) This subelement is a grouping of the following subordinate fields that provide information on how to obtain the information resource from this distributor.

- **Order Information** (Not Repeatable) This subelement provides information on how to obtain the information resource from this distributor.
- Cost (Not Repeatable) This subelement indicates whether or not there is a cost associated with this resource.
- Cost Information (Not Repeatable) This subelement contains textual information about the cost associated with this resource.

**TECHNICAL PREREQUISITES** (Not Repeatable) This subelement describes any technical prerequisites for use of the information resource as made available by this distributor.

**AVAILABLE TIME PERIOD** (Repeatable) This subelement provides the time period reference for the information resource as made available by this distributor. One or both of the following forms may be used:

- Available Time Textual (Not Repeatable) Time described textually.
- Available Time Structured (Repeatable) This form is a grouping of date subelements which are used together to indicate a range.
  - Beginning Date (Not Repeatable)
  - Ending Date (Not Repeatable)

**AVAILABLE LINKAGE** (Repeatable) This subelement provides the information needed to contact an automated system made available by this distributor. Available linkages are appropriate to reference other locators, facilitate electronic delivery of off-the-shelf information products, or guide the user to data systems that support analysis and synthesis of information. This subelement consists of the subordinate elements Linkage Type and Linkage. It must be repeated for every new instance of Linkage Type.

- Linkage Type (Not Repeatable) This subelement occurs if there is a Linkage. It provides the data content type (i.e., MIME) of the object identified in the referenced URI to give the user an indication of what is being connected to (e.g., document, image).
- **Linkage** (Repeatable) This subelement provides the machine readable information needed to perform the access (i.e., URI).

**SOURCES OF DATA** (Not Repeatable) This element identifies the primary sources or providers of data to the system, whether within or outside the agency.

**METHODOLOGY** (Not Repeatable) This element identifies any specialized tools, techniques, or methodology used to produce this information resource. The validity, degree of reliability, and any known possibility of errors should also be described.

**ACCESS CONSTRAINTS** (Not Repeatable) This element is a grouping of subelements that together describe any constraints or legal prerequisites for accessing the information resource or its component products or services.

- General Access Constraints (Not Repeatable) This subelement includes any access constraints
  or legal prerequisites applied to assure the protection of privacy, and any other special restrictions
  or limitations on obtaining the information resource.
- Originator Dissemination Control (Not Repeatable) This subelement contains specifics
  determined by the originator of the information resource pertaining to the control of access to or
  dissemination of this resource.
- **SECURITY CLASSIFICATION CONTROL** (Not Repeatable) This subelement contains specifics pertaining to the security classification associated with the information resource.

**USE CONSTRAINTS** (Not Repeatable) This element describes any constraints or legal prerequisites for using the information resource or its component products or services. This includes any use constraints applied to assure the protection of privacy or intellectual property and any other special restrictions or limitations on using the information resource.

**POINT OF CONTACT** (Not Repeatable) This element identifies an organization, and a person where appropriate, serving as the point of contact plus methods that may be used to make contact. This element consists of the following subelements:

- Contact Name
- Contact Organization
- Contact Street Address
- Contact City
- Contact State or Province
- Contact Zip or Postal Code
- Contact Country
- Contact Network Address
- Contact Hours of Service
- Contact Telephone
- Contact Fax

**SUPPLEMENTAL INFORMATION** (Not Repeatable) Through this element, the record source may associate other descriptive information with the GILS Core locator record.

**PURPOSE** (Not Repeatable) This element describes why the information resource is offered and identifies other programs, projects, and legislative actions wholly or partially responsible for the establishment or continued delivery of this information resource. It may include the origin and lineage of the information resource, and related information resources.

**AGENCY PROGRAM** (Not Repeatable) This element identifies the major agency program or mission supported by the system and should include a citation for any specific legislative authorities associated with this information resource.

**CROSS REFERENCE** (Repeatable) This element is a grouping of subelements that together identify another locator record or related information resources likely to be of interest.

- Cross Reference Title (Not Repeatable) This subelement provides a human readable textual description of the cross reference.
- Cross Reference Relationship (Repeatable) This subelement may be drawn from a controlled list of terms describing the relationship of the cross referenced object to this locator record. Values useful in the USMARC context include: original language, translation, supplement/special issue, parent, host item component item, other edition, additional physical form issued with, preceding entry, succeeding entry, and data source entry.
- Cross Reference Linkage (Repeatable) This subelement is a grouping of subelements that
  together provide information needed to access the referenced object. It is composed of the
  subordinate elements Linkage Type and Linkage. Cross Reference Linkage is repeated for each
  new instance of Linkage Type.
  - Linkage Type (Not Repeatable) This subelement occurs if there is a Linkage. It provides the
    data content type (i.e., ) of the object identified in the referenced URI to give the user an
    indication of what is being connected to (e.g., document, image).
  - Linkage (Repeatable) This subelement provides the machine readable information needed to perform the access (i.e., URI).

**SCHEDULE NUMBER** (Not Repeatable) This element is used to record the identifier associated with the information resource for records management purposes.

**CONTROL IDENTIFIER** (Not Repeatable) This element is defined by the information provider and is used to distinguish this locator record from all other GILS Core locator records.

**ORIGINAL CONTROL IDENTIFIER** (Not Repeatable) This element is used by the record source to refer to another GILS locator record from which this locator record was derived.

**RECORD SOURCE** (Not Repeatable) This element identifies the organization that created or last modified this locator record.

**LANGUAGE OF RECORD** (Not Repeatable) This element indicates the language of the locator record as represented by the MARC three character alpha code.

**DATE OF LAST MODIFICATION** (Not Repeatable) This element identifies the latest date on which this locator record was created or modified.

**RECORD REVIEW DATE** (Not Repeatable) This element identifies a date assigned by the Record Source for review of this GILS Record.