

AGRIS: Guidelines for the Description of Information Objects in the International Information System on Agricultural Sciences and Technology

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Language: English Version 1.0

by GILW, Library and Documentation Systems Division

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Document Metadata

	Scheme	Value
Title		AGRIS: Guidelines for Description of Information Objects for International Information System on Agricultural Sciences and Technology
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subjectThesaurus		LIBRARIANSHIP; STANDARDS; INFORMATION STORAGE
Subject.	<u>CABIT</u>	information processing; information systems; information
subjectThesaurus		storage; AGRIS
Subject.	<u>LCSH</u>	Agricultural Metadata Element Set Handbooks, manuals,
subjectThesaurus		etc.; Information storage and retrieval systems—
		Agriculture; Metadata; Exchange of bibliographic
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Publisher		Rome, Italy. FAO
Description		The AGRIS AP defines a metadata set for use in exchange of
		information between AGRIS centres. It was created and is
		currently maintained by the AGRIS/CARIS Coordinating
		Group of the Food and Agriculture Organization of the
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Туре	DCMIType	Text
Format.Extent		84 p.
Language	ISO639-2	eng
Rights	URI	http://www.fao.org/copyrigh.htm

Document Metadata in HTML

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Document Metadata in XML/RDF

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1. Introduction

The first **COAIM** (Consultation on Agricultural Information Management), held in June 2000 recognized that AGRIS should become "a key enabler and catalyst to establish a new model of agricultural information management". Furthermore, it was agreed that FAO [1] should develop AGRIS into a capacity building initiative as well as an information system. The AGRIS network now has 201 Resource Centres, which vary in their resources and level of participation in the network, and opportunities exist to improve the effectiveness of the initiative through enhanced collaboration.

A proposal for a new metadata standard for AGRIS reference was presented at COAIM 2002. This paper is a result of the evaluations made during COAIM 2002. It defines a set of high quality metadata on scientific and technical papers, and is directed at improving accessibility of materials on the Web. The standard also covers the necessary metadata for retrieving publications that are available only in paper format or that have restricted access.

1.1 Goals and Objectives

The goal of the AGRIS Application Profile (AGRIS AP) is to facilitate exposure of the metadata format currently in use to enable linking of various types of information systems in FAO that are presently unlinked, therefore allowing users to perform cross-searches. This approach would also facilitate the harvesting of data from participating countries; with the application of the AGRIS AP model, this harvesting process could be automated.

The AGRIS AP is based on the Dublin Core Elements and Qualifiers [2], the Agricultural Metadata Element Set [3], and the Australian Government Locator Service Metadata Set [4].

The expected benefits of AGRIS AP are:

- a common format for exchange and description of information resources within the current AGRIS network;
- a standard data model for bibliographic description of resources in the domain of agriculture, covering publications in different areas of the domain such as Fishery, Forestry, etc.;
- different communities being able to access and re-use existing application profile schema and to
 establish a common format for homogenizing results on a search interface derived from parallel
 searching of heterogeneous archives, i.e. the AGRIS Multi-host Server;
- · harvesting of metadata from data sources within and beyond the domain of agriculture; and
- a common approach to sharing information between applications and standards makers, while promoting interoperability between systems.

1.2 Methodology

The strategy and methodology adopted to formulate the AGRIS AP involved the following:

- Development of a conceptual map of the different types of information resources used in the AGRIS
 application.
- Remodelling of the AGRIS data model to meet current information needs (such as description of Web pages and databases).
- Evaluation of standards and common resource description practices, mainly using the Dublin Core Metadata Element set (DCMES) and the Agricultural Metadata Element Set (AgMES).
- Mapping of currently used elements to the available element pool from DCMES and AgMES.
- Proposing the unavailable elements and schemes to be included in the AgMES.
- Coding of the application profile schema into XML DTD, and studying of implementation results and problems for further enhancements and/or amendments.

This document provides creation and implementation results of the AGRIS application profile.

2. What are the resources?

2.1 What are the resources?

The importance of a collaborative network like AGRIS & CARIS and of the centres that participate in it globally, lies in the documentation to which they alone have access. National centres are the storehouse of what is commonly referred to as traditional knowledge, the legacy of experience over time in agriculture and the sciences, in the fight to achieve and maintain acceptable standards of living.

We should always remind ourselves of why we are maintaining a network of information collection, conservation and dissemination. The knowledge contained in the resources that are indexed and inputted to the national and central AGRIS database empower the policy and decision-makers, the agriculturalists, extension workers, researchers and scientists to strengthen their efforts towards food security and sustainable development. Good quality information can and does improve the quality of life itself.

Resources covered by the AGRIS centres – illustrations, reports, theses, manuals etc. – have been produced locally over time, and are often unavailable nowadays. Even if they were printed at some point, they are more than likely to be out of print now. Financial and human resources are everywhere at a minimum and many institutions in the developed and developing world hold the last copy in existence of numerous subject-specific publications.

Electronic publishing has brought both new opportunities and new problems to users, but in the field of rare or limited publications it represents the gateway to accessibility. These documents can be scanned and reproduced on-line for everyone to consult. Even when they are in such a physical state that reprinting would do more harm than good, a document can be scanned and published on-line. These are the unique resources which the AGRIS resource centres are in a position to offer to the agricultural community in the world: printed references for the researcher, extension worker, scientist and student. Making them available on line wherever possible perpetuates man's knowledge of agricultural systems in any given area, through access to a wealth of invaluable information derived from generations of practical experience.

The continuing transmission of this knowledge will empower the users of this information in their efforts to achieve sustainable development. It will also, albeit much more slowly, help to narrow the "digital divide", because although many countries will not be able to benefit from the advantages of technological progress for a long time to come, they will nevertheless be able to access printouts of the publications which are added to the AGRIS database, just by visiting or even writing to the national AGRIS centre.

The selection process is of primary importance for all AGRIS resource centres. The centres are responsible for collecting all relevant material published within their territory in the field of agriculture. The general selection criteria should be:

2.2 Usefulness and availability

The contents of a documentary unit are, and should be, of general interest and the publications it holds should be obtainable. Therefore the following items should be **excluded**:

- ephemeral material (short-lived information)
- restricted or confidential material (unless de-restriction is obtained from the creators)
- news on local events (interviews without technical value, announcements of awards, calls for vaccination against diseases, etc.)
- legislation on local subjects of short duration (decrees establishing prices of agricultural products in a province, resolutions naming officers, etc.)
- · comments on agricultural exhibitions
- · inter-institutional agreements
- book reviews
- calendars of research and training centres and their programmes, given only superficial treatment
- textbooks for secondary education and, in general, texts on the basic sciences, treated superficially
- articles to promote sales of agricultural equipment and supplies (advertisements) which do not provide in-depth information
- multilingual simultaneous editions
- preprints of conference papers (especially if it is expected that the conference proceedings will be published within approximately 6 months)

- non-original or repetitive material published in popular journals
- reprints of journal articles (the original article should be described instead); but include preprints of
 important articles or copies of manuscripts, when available, as they are generally circulated long before
 the original article appears in print
- short note-type articles or those of insubstantial content but include:
 - a very short article on original taxonomic description
 - a case study in veterinary medicine
 - notes on projects in progress
 - summaries of theses or conference papers if full length work is not available
 - obituaries of outstanding scholars especially when they include a bibliography on a subject about which little has been published

In some cases, when the contents of a document are treated seriously and in depth, also include:

- · editorials, letters to editors or material which appears in regular columns
- bibliographic units without creators (anonymous)
- opening speeches in meetings, conferences. etc.

With reference to **extension literature** the following general criteria are suggested:

- include literature produced for the extension worker
- exclude literature produced by the extension worker, unless widely applicable.

Since it is difficult to apply uniform selection criteria for extension literature on a worldwide scale, always apply the same criteria of usefulness, date limits, etc., described in the previous and following paragraphs, i.e. **include:**

- summaries or translations of extension documents in a language in which little has been published on that subject
- textbooks or extension manuals that may be used by other extension workers in similar agricultural situations.

2.3 Scope of these specifications

These specifications are meant to replace the data entry process described in the previous AGRIS Guideline Manual (1998). The new specifications are proposed in the light of many pressing issues, some of which are: a greater need for sending data in XML format; less willingness to send data in ISO2709 format; and rapid developments in technologies which allow for the searching of multiple databases.

The **scope of AGRIS** should extend to include all forms of electronic publishing: databases, Web pages, national portals on scientific and technical information on Agriculture. To recapitulate: the *breadth* of input to AGRIS is increasing to cover specialized and relevant *local* information, pertinent to agricultural sciences and technology, but without losing sight of its focus. This increase of scope would allow for more technical and scientific coverage.

The changes are made with the users in mind: what are they searching for? It became clear that some of the entries in the AGRIS data entry form are created for cross-checking, some are created principally with non-electronic resources in mind and the data structure was mainly flat and could not immediately be applied to the more popular and practical relational databases.

The current format of the specifications can be used for storing information in XML, RDF as well as for storing in relational databases.

3. AGRIS Application Profile

3.1 What is an application profile?

With the current trend for promoting reuse instead of reinvention, the AGRIS AP has been created taking elements and refinements that are already in existence. Before introducing the AGRIS AP, let's look at what actually constitutes an application profile. When dealing with application profiles, it becomes important to discuss **namespaces**. In the sections below, first we take a look at what is a namespace and then give a brief introduction to how an application profile is created.

a. Namespaces

The W3C XML community defines a mechanism called *XML namespaces*, which can be used as single XML document containing elements and attributes that are defined for and used by multiple software components. This use by multiple software promotes reuse and restricts reinvention.

Their definition:

An **XML** namespace is a collection of names, identified by a URI reference which are used in XML documents as element types and attribute names. XML namespaces differ from the "namespaces" conventionally used in computing disciplines in that the XML version has an internal structure and is not, mathematically speaking, a set. [5]

In the context of the AgMES initiative, all the newly defined elements in Agricultural Metadata Element Set (AgMES) constitute a namespace. The AgMES defines elements needed to accurately describe various types of information resources in the domain of agriculture. This element set is maintained at a stable location and identifies a reference point where elements are defined and are maintained to be used by different applications.

For example:

The AgMES namespace provides the following information:

- It identifies the management authority for all the elements and schemes, which in this case is FAO;
- It provides unique identifiers for elements; and
- · It uniquely defines schemes and controlled lists.

The creation of the AgMES is an on-going process. Proposed new elements and schemes may be appended to the current list after proper amendment procedures are followed.

b. Application Profiles

The concept of the application profile is not new and therefore several definitions have been provided by different communities. An article published in the Journal of Digital Information, recounts several such definitions from communities such as Z39.50, IEEE standardization, FGDC etc. [6]

With their experience in the European DESIRE project, Heery and Patel introduce 'application profile' as a type of metadata schema.

Their definition:

An **application profile** is a type of metadata schema which consists of data elements drawn from one or more namespaces, combined together by implementors, and optimised for a particular local application. [7]

In the context of the AgMES initiative, an application profile has the above definition. The elements in every application profile will consist of elements, refinements and schemes drawn from the DCMES, AgMES or any other namespace from which a term might be reused to meet the needs of the FAO applications.

For example:

The AGRIS application profile does the following:

• It draws elements from existing namespaces, namely DCMES and AgMES;

- · It introduces no new data elements;
- It specifies the cardinality and data-typing information;
- · It specifies the application-specific schemes and controlled list values; and
- It slightly refines standards definitions of some of the elements.

c. Benefits of differentiation - Namespace vs. Application Profile

The accurate differentiation of these two terms is required to emphasize the different purpose they serve.

A namespace schema allows new terms to be coined, allowing them to have unique URIs. Additionally, the use of namespaces allows other implementers in the same or different domains to see if a term has already been coined, therefore reducing reinvention of similar terms having different meanings or different terms having similar meanings.

The use of application profiles allows implementers to share information about the data-model of their applications. This will allow interweaving between a wider group of audience and within communities, and promote common terminology and good practices in sharing information.

3.2 Essential Definitions

The three most commonly used terms in this document are described below for the sake of clarification.

- **Element** An element is described as a unit of data or metadata. The element allows us to give more information about the described information.
- **Element Refinement** An element qualifier makes the meaning of an element either narrower or more specific. Additionally, element refinement shares the meaning of the unqualified element, but with a more restricted scope. When a client does not understand the element refinement, it can be ignored and the value is used as content of the unqualified element.
- Encoding Scheme An encoding scheme aids in the interpretation of the value of an element. Encoding schemes may either be controlled vocabularies or formal notations. A value drawn from an encoding scheme can be taken from a controlled list of vocabulary (e.g. a term from a classification such as ASC (AGRIS Subject Categories) or a term from a thesaurus such as AGROVOC). Formal notations are used to format a value of an element (e.g., date expressed the "YYYY-MM-DD" format). When a client does not understand the encoding scheme, it can be still useful for human readers.

3.3 Foreseen Advantages

The new AGRIS AP requirements are designed to replace the current practice with a more robust one that foresees the trend towards more and more resources being made available electronically. By adhering to the AGRIS AP requirements, it is hoped that we can see long-term benefits which will only be possible through a high level of commitment and effort.

The new requirements are expected to provide several benefits, including:

- · providing the AGRIS audience with information of high quality with medium complexity;
- providing a standardized format for the exchange of bibliographic information;
- allowing AGRIS Resource Centres to provide their information in XML/RDF formats or to be easily
 exposed for multi-host searches.

4. Elements in AGRIS AP

4.1 General Issues

The new AGRIS AP requirements are designed to replace the current practice with a more robust one that foresees the trend towards more and more resources being made available electronically. The use of application profiles allows implementers to share information about the data-model of their applications.

Many changes have been incorporated into the new AP that were not in the previous AGRIS Guidelines and like wise many rules are not included into the new guidelines. It is important to note that the AGRIS AP takes the role of an **exchange format** to enable for the collection of bibliographic references from various partners. This explains its generic but robust form and thus it will be understood that it is **not a cataloguing manual**, but a reference to **a metadata set** for exchange of agricultural information within the AGRIS Network.

This section deals with issues that have a global inference to the XML based exchange format. For AGRIS Specific issues, see Appendix B.

4.1.1 Language attribute

The AGRIS Application Profile will be encoded using eXtensible Markup Language (XML). XML provides the possibility to have a *language attribute or xml:lang=""* attribute. In this AP, this attribute has been used for elements for which it was considered necessary to know the language of the content. This extensibility also enables for multiple values of the specified field in different languages.

The previous AGRIS input rules recommended the use of the 2 letter codes of the ISO 639-1 standard. However the AGRIS AP recommends the use of the 3 letter codes of the ISO 639-2 because it covers more languages than the previous one¹.

e.g.

Examples

<dc:title xml:lang="eng" >

Major diseases of pineapple in Oaxaca, Mexico, and their control </dc:title>

4.1.2 Metadata Schemes

Controlled Lists for the content of an element, also known as schemes, are ways in which metadata can be created collaboratively using a predefined structure. This ensures that metadata values have a unified and structured set of data. Certain elements which are critical for searching necessitate the use of controlled values. The AGRIS AP recommends the use of schemes where needed for ex. creatorCorporate, creatorConference, subjectClassification, subjectThesaurus etc.

If local authority files exist, values for some elements such as Citation Title and Personal Author, can be taken from them.

4.1.3 Predefined Entity References

XML predefines the five entity references as shown below. These predefined entity references are used in XML documents in place of specific characters that would otherwise be interpreted as part of markup language.

¹ Codes for the Representation of Names of Languages (ISO639-1 and ISO639-2) http://www.loc.gov/standards/iso639-2/langcodes.html

e.g.

Character	Entity References
&	&
<	<
>	>
"	"
('

4.1.4 AGRIS Resource Number : Unique IDs for resources

This field corresponds to the previous AGRIS field of Temporary Record Number (TRN). It is recommended that a unique numbering system be used to differentiate between two records.

e.g.

This field is mandatory for all records submitted to AGRIS. No record can be submitted without this information.

The ARN may consists of twelve characters which may be derived from the following four parts:

Part	Description
IC	the two-letter ISO country code of the country where the AGRIS Resource centre is located for the code of the multinational or international institution submitting input. This list can be found in the ISO3166-1² for geographic codes. AGRIS codes that are currently being used by the centres are provided in Appendix C .
Year	In which the input record is created. This must be in four digits and is not the year of publication of the resource.
S	the sub-centre code assigned by the Resource Centre, one character only, to be used in countries with more than one resource centre. It may be a letter or a digit. In countries where there are more than nine sub-centres the sub-centre code may be a letter. For countries with one resource centre a zero (0) should be entered in this field.
Serial Number	assigned by the Resource Centre in ascending sequence (5 character, usually digits). Numbers are assigned on an annual basis, starting the year with 00001 to 99999.

e.g.

Part	Description
TRN for 697 th record submitted by Philippines	PH1998000697
AGRIS centre in 1998 with one resource centre	111100000007

For AGRIS centres operating with more than one AGRIS sub-centre's the sub-centre TRN should be used to allow each sub-centre to control its range of TRN numbers.

e.g.

Let's assume that the Indonesian AGRIS centre cooperates with 3 sub-centres:

Examples

² Country names (official short names in English) in alphabetical order as given in ISO 3166-1 and the corresponding ISO 3166-1-alpha-2 code elements. http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html

ID1998**0**0001-**0**9999 is used by the **main AGRIS centre**,
ID1998**1**0001-**1**9999 is used by the **subcentre 1**,
ID1998**2**0001-**2**9999 is used by the **subcentre 2**, etc

If a centre would like to provide access to AGRIS resources using their own local numbering, they may do so.

4.1.5 The AGRIS AP Element Set

Element	Qualifier Element Refinement(s)	Encoding Schemes/ Controlled List
(DC) Title	(DC) Alternative	
	(AGS) CreatorPersonal	
(AGS) Creator	(AGS) CreatorCorporate	
	(AGS) CreatorConference	
(DC) Publisher	(AGS) PublisherName	
(BO) I dollarier	(AGS) PublisherPlace	
(DC) Date	(DC) Issued	
	(AGS) SubjectClassification	ASC CABC DDC LCC UDC
(DC) Subject	(AGS) SubjectThesaurus	AGROVOC CABI Codes CABT ASFAT NALT MeSH LCSH
	(AGS) SubjectNotes	
(DC) Description	(AGS) SubjectEdition	
	(DC) Abstract	
(DC) Identifier		URI ISBN ISSN RN JN PN IPC
(DC)Type		DCMI Type Vocabulary
(DC) Format	(DC) Extent	
(= 5) · 5at	(DC) Medium	IMT
(DC) Language		ISO 639-2

(DC) Relation	(DC) Is Version Of (DC) Has Version (DC) Is Replaced By (DC) Replaces (DC) Is Required By (DC) Requires (DC) Is Part Of (DC) Has Part (DC) Is Referenced By (DC) References (DC) Is Format Of (DC) Has Format (AGS) Is Translation	URI ISBN ISSN RN JN PN IPC
(AGS) Availability (AGS) AvailabilityLocation (AGS) AvailabilityNumber		
(DC) Source		
	(AGS) CitationTitle	
(AGS) Citation	(AGS) CitationIdentifier	ISSN CODEN
,	(AGS) CitationNumber	
	(AGS) CitationChronology	

4.2 Titles: Title, Alternative Title

Summary

4.2.1 Title <dc:title/>

Definition Purpose

Rules for encoding Title

Selecting the Title Language of the Title Punctuations in the Title

Sub-Titles and Other secondary elements

Additional Titles
Title Enrichment
Chemical Terms
Biographical articles
Abbreviated names
No Title

4.2.2 Alternative Title <dcterms:alternative />

Definition Purpose

Rules for encoding Alternative Title

Summary

Notes	Enter in this field the title of the document. Indicate the language of the		
	title using "xml:lang".		
Corresponding Tags	dc:title		
	dcterms:alternative		
Data type	String		
Obligation	Mandatory		
Maximum Occurrence	Repeatable		
Attributes	xml:lang Mandatory • select values from ISO939-2 list		

4.2.1 Title <dc:title/>

Definition

A name given to the resource.

Purpose

This field is used to indicate the name by which the resource is formally known.

Rules for encoding Title

Selecting the Title

Enter in the Title field the **main title** of the resource you are describing, e.g. the title of a monograph, of a chapter of a book or a journal article.

The title **should be selected from** (listed in preferential order):

- the title page
- the front matter (e.g. the half title page, title page verso) or the colophon (back matter)
- prefaces, forewards, etc. cover or spine
- for journal articles, books, chapters, etc. use the title given at the beginning of the article, chapter, etc.

Copy the title in full, including the sub-title and any other secondary information. Use the exact wordings of the title, but not necessarily its capitalization and punctuation. Correct obvious typographical errors. Capitalize only the initial letter of the first word of the title and of proper names (personal, corporate, geographic, etc.) appearing in it.

е		g	
---	--	---	--

Title in original	Title for input
Solar Radiation Energy and its Utilization by	Solar radiation energy and its utilization by
Lucerne (Medicagosativa L.)	Lucerne (Medicagosativa L.)

Serial Titles should be placed in the citation field (See 4.14.1).

Language of the Title

Indicate the language of the title using the xml:lang attribute. The language should be selected from the ISO639-2.

Punctuations in the Title

Omit any punctuation marks at the end of the title, but retain terminal question marks "?" and exclamation marks "!", terminal brackets "]" and parentheses ")" and the full stop "." if the last word of the title is an abbreviation.

Use a space before continuing the text after any punctuation marks, e.g. full stops, commas.

On many title pages spacing is used in the title (e.g. new line) instead of punctuation. Supply punctuation whenever required.

e.g.

Title in original	Title for input
AGROVOC	AGROVOC: Multilingual agricultural thesaurus
Multilingual	
Agricultural	
Thesaurus	

Sub-Titles and Other secondary elements

Use a full stop and a space to separate main title and sub title and other secondary elements.

Additional Titles

Use repeated title fields to add any other titles that may be useful for locating the resource.

Title Enrichment

When titles are meaningless, incomplete, ambiguous, misleading, or too general title enrichment is highly recommended. Words (enrichment) should be added which will correct the deficiencies and will reflect the content of the document. All additional words should be enclosed in square brackets and either placed at the end of the original title or be interpolated in the title where most suitable, but generally not before the third word in the title.

e.g.

Examples of Title enrichment
On the state of man [world agricultural situation]
Technology and manpower policies [agricultural manpower, Mexico]
Effect of cultural practices [in vineyards] on soil moisture management
Conclusions and recommendation of the first Argentine Congress on Wool [sheep
production, wood marketing]
Cost of animal feed [pigs, substitution of maize by cassava]
Core literature in human nutrition [a review article]
Forestry and forest products [an automated bibliography]
Model of soil salinity effects on crop growth [irrigation, drainage]
The predator-control scene as of 1995 [coyote populations and sheep losses]

Chemical Terms

Titles containing chemical terms should be enriched by an approved common name, if one exists or by an appropriate qualifying term.

e.g.

Title in original	Title for input
Control of Spinach leaf miners with Bayer	Control of Spinach leaf miners with Bayer
170715	170715 [organophospate]

Biographical articles

Titles of biographical articles lacking the name of the profession of the biographee and his country should be enriched.

e.g.

Title in original	Title for input
Albert Pilat (1903-1974)	Albert Pilat (1903-1974) [mycologist,
	Czechoslovakia, obituary]
Paulo da Cunha Nobrega: posthumous	Paulo da Cunha Nobrega: posthumous
homage	homage [biologist, Brazil]

Abbreviated names

Abbreviated names of states or provinces, acronyms of institutions or chemicals should preferably be written out to make them meaningful for data retrieval. If some elements are repeated in the title, it is sufficient to introduce them in extended form just once. Chemical notations that could require characters not

available in the AGRIS character set should be rewritten according to the IUPAC rules³, avoid subscripts and superscripts.

e.g.

Title in original	Title for input
Rabies occurrence in Tracotapa, Guer.	Rabies occurrence in Tracotapa, Guerrero
	[Mexico]
Research activities at IRRI	Research activities at IRRI [International
	Rice Research Institute, Philippines]
The effect of soil Ca level in four soil pH-Mg	The effect of soil Ca level in four soil pH-Mg
combinations on the Ca and Mg level in	[hydrogen-ion concentration-magnesium]
sweet corn	combinations on the Ca and Mg level in
	sweet corn
Some hazards in the application of TCNB to	Some hazards in the application of TCNB
horticultural crops	[tecnazene, 1, 2, 4, 5-tetrachloro-3-
	nitrobenzene] to horticultural crops [potatoes,
	peas, squash]
Giberellin A ₃ -3 _H	Giberellin A3-3H

No Title

In the **rare cases where no title appears** on the resource, for example, in certain editorial articles, if possible, supply a title in **English** and enclose it in square brackets "[]". If the title is supplied by the cataloguer, place a note in Description Notes element "Title supplied by cataloguer".

4.2.2 Alternative Title <dcterms:alternative />

Definition

Translation of the title supplied by the cataloguer.

Purpose

This element is used to indicate translated titles not borne on the resource.

Rules for encoding Alternative Title

If the original title of the resource is translated by the cataloguer enter the information in this field. This filed must be supplemented with the language of the translation.

³ International Union of Pure and Applied Chemistry. Nomenclature of Organic Chemistry. London (UK), Butterworths Scientific Publications, 1971. 338 p. http://www.iupac.org/dhtml home.html

4.3 Creator: Personal, Corporate and Conference

Summary

4.3.1 Personal Creator <ags:creatorPersonal />

Definition

Purpose

Rules for encoding Personal Creator

Selecting the Personal Creator

Order of Names

Form of Name

Special Languages

Compound Surnames

Variant Forms

Lack of Surname

Pseudonyms/Former Names

Additions to Names

Roles

Affiliations

4.3.2 Corporate Creator <ags:creatorCorporate />

Definition

Purpose

Rules for Encoding Corporate Creators

Selecting Corporate Creators

Form of name

Abbreviations

Firm Names

4.3.3 Conference <ags:creatorConference />

Definition

Purpose

Selecting conferences

Rules for Encoding Creator Conference

Rules for encoding Conference

Selecting the Name

Named and Unnamed conferences

Rules for encoding Conference Number

Rules for encoding Conference Place

No Place

Rules for encoding Conference Date

Summary

Notes	Enter in these fields the Creators associated with the resource. It may include a person, an organization, a service or an agency. This element describes all entities (Agents) that handle the resource i.e. creating or contributing.
Corresponding Tags	ags:creator
	ags:creatorPersonal
	ags:creatorCorporate
	ags:Conference
Data type	String
Obligation	Mandatory if available
Maximum Occurrence	Repeatable
Attributes	xml:lang Optional • Select values from ISO639-2 list

4.3.1 Personal Creator <ags:creatorPersonal />

Definition

Person responsible for creating the intellectual content of the resource. There may be more than one.

Purpose

This field is used to enter the names of all the persons responsible for the intellectual content of a work and occasionally, the relationship of each creator to the work. It allows for locating resources based on the creator of those resources, for example, all resource by "Thien Kim".

Rules for encoding Personal Creator

Selecting the Personal Creator

All persons responsible for the intellectual content of a resource are treated as personal creators and their names should be entered in the this field.

Order of Names

When multiple names appear on the resource, they should all be listed in the sequence shown on the resource. When there are principle creators and other creators who contributed to a resource, enter all the creators as they appear.

e.g.

Examples
Brown, D.
Holland, M.
Coulter, J.
Hindmarsh, P.
Markin, J.

Form of Name

In general, data in the personal creator field are entered in the following sequence:

surname, forename initial(s), prefixes, particles, role, affiliation.

For entry of creators in specific languages, see guidelines below.

Creator's names usually consist of a first name (forename) and a surname (family name). The surname is entered first, followed by a comma and a space. Then the first name(s) or, in general, the initial(s) is (are) entered, each initial followed by a full stop without space, e.g.

Examples	
Brown, A.	
Brown, A.F.	

Some names contain **name fragments or particles** like

e.g.

Examples

van, van der, vander, von, le, lo, la, da, de, del, de la, della, des, do, du, Jr, Sr, II, III.

If these prefixes are transposed to the end of the name according to the rules below, they are separated from the preceding information by a space and are not followed by punctuation mark, e.g.

Examples

Beethoven, L. van

Special Languages

Transliteration is used for names from **Arabic, Cyrillic and Greek** alphabets. If the form of the creator's name is already a transliteration, use it. You may wish to identify the original spelling and give it in the Description/Notes Field (See 4.6.1) as a variant form.

In transliterations, initials may consist of more than one character, e.g.

Examples
Sviridov, Ya. V.

Language	Entry Element	Exceptions
Afrikaans	Prefix	
Arabic	See remarks below	
Czech	Part following prefix	If the surname is a z and a place name, enter under the place name
Danish	See: Scandinavian Languages	
Dutch	Part following prefix	ver: enter under prefix
English	Prefix	
French	Part following prefix	Article or contraction of an article and a preposition, enter under prefix
German	Part following prefix	Article or contraction of an article and a preposition, enter under prefix
Italian	Prefix	
Norwegian	See: Scandinavian Languages	
Portuguese	See remarks below	
Romanian	Prefix	de: enter under name following prefix
Scandinavian Languages	Following the prefix	Name of Dutch or German origin, enter under part following prefix
Clavel	Soo: Czoob	de: enter under prefix
Slovak	See: Czech	If it are auticle and a control of
Spanish	Part following prefix and see Compound surnames below	If it an article only, under article

Adapted from: Anglo-American Cataloging Rules, 2nd ed.

Arabic family names with prefixes such as El, Ben, Hadj, Ould, Beni are preferably written with a hyphen, e.g.

Examples
El-Midani
Ben-Salem
Hadj-Milan
El-Hadj-Amor
Oud-Brahim
Beni-Hani

Portuguese terms denoting family relationships (e.g. Neto, Junior, Filho, and Sobrinho) form an integral part of the name, and are entered,

e.g.

Examples

Coimbra Filho, A. F

Compound Surnames

Compound Surnames, as in the case of **Spanish** surnames, may be written either in full or the second part of the name (matronymic) may be abbreviated. The initial(s) representing the matronymic is/are entered with no full stop before the comma,

e.g.

Examples

Morales A, A. or Morales Alvares, A.

Lopez M del O, A. or Lopez Murano del Ortega, A.

Variant Forms

In cases of issue involving rendering of names, provide additional information in the notes field, e.g.

Examples

Chzhan, P. W.

Creator variant: Chang, P. W. (Provided in the notes field)

Romanization of Chinese or Japanese names is obtained in one of the following ways:

- Copying any version in Latin script provided in the resource itself.
- Romanizing according to local (AGRIS Resource Centre) rules (AGRIS has not adopted specific rules for the transcription of names from ideographic scripts)

Lack of Surname

However, in the case of e.g. some **Asiatic or African** names the full name without comma and/or full stop is also accepted provided it is used consistently, e.g.

Examples

Chumpei He

Pseudonyms/Former Names

Pseudonyms or former names may be entered in the Notes Field (Description/Notes).

Additions to Names

Honorary titles are given immediately after the creator's surname and before the initials with their first letter upper case followed by a space,

e.g.

Examples

Huxley, Sir T.

Academic titles (Dr., Ing., Lic. etc.) are not entered.

Roles

For those creators who contributed to the intellectual content, if possible, specify their role in as short of form as possible. For editors and compilers, use ed. or comp. For all other roles, do not abbreviate.

Enter this information at the end of the name with any prefixes or particles and put the role in parentheses. e.g.

Examples
Brown, A. (ed.)
Smith, T. M. R. III (comp.)
Mukuri, P. (Web Coordinator)

Affiliations

Affiliations are defined as the name of the organization where the creators were employed or where they carried out their work, and should not be confused with the creator's current addresses.

Affiliations are preferably entered in a standardized form according to rules for corporate creator, as shown in the following section on rules for entry of Corporate Creator.

Affiliations, if any, are separated from the creator's name by a space and are enclosed between parentheses,

e.g.

Affiliation Examples

Coimbra Filho, A. F. (Instituto de Conservação da Natureza, Rio de Janeiro (Brazil). Div. de Pesquisas)

Smith, T. M. R. III (comp.) (FAO, Rome (Italy))

4.3.2 Corporate Creator <ags:creatorCorporate />

Definition

Organization or agency responsible for creating the intellectual content of the resource.

Purpose

This field is used to enter the names of all the corporate bodies responsible for the intellectual content of a work and occasionally, the relationship of each corporate body to the work. It allows for locating resources based on the creator of those resources, for example, all resource from "Div. de Pesquisas".

Rules for Encoding Corporate Creators

Selecting Corporate Creators

Enter in this field the name and location of the corporate body identified on the resource as responsible for its content. The corporate body may be identified as:

- the body responsible for the intellectual content in the absence of a personal creator.
- the issuing body in conjunction with a personal creator.
- the assignee of a patent.
- the academic institution granting degrees.
- the country issuing legislative literature.

Form of name

Enclose the name of the country between parentheses and enter it as it appears in AGROVOC.

If no place is given, add at least the country name between parentheses.

e.g.

Examples

Asian Inst. of Journalism (Philippines)

In general, when the corporate creator field consists of only **the main** institution, it is entered in the following sequence:

Name of institution, Place (Country)

e.g.

Examples

Instituto Nacional de Investigaciones Agrarias, Madrid (Spain)

Forest Service, Berkley, Calif. (USA)

Lembaga Oseanologi Nasional, Jakarta (Indonesia)

Faculte des sciences agronomiques de l'etat, Gembloux (Belgium)

If it consists of **subordinate bodies**, it is entered in the following sequence:

Main Institution, Place of the subordinate body (Country). Smallest subordinate body

e.g.

Examples

Instituto Nacional de Tecnologia Agropecuaria, Buenos Aires (Argentina). Inst. de. Patologia University of the West Indies, St. Augustine (Trinidad and Tobago). Dept. of Agricultural Extension

Smallest subordinate bodies which are departments of universities should be written in the form "Dept. of ..." and not "... Dept."

e.g.

Examples

University of the Philippines at Los Banos, College, Laguna (Philippines). Dept. of Soil Science

Exception: If an institution consists of "subordinate bodies" with identical names, an intermediate body may be added to avoid ambiguity.

e.g.

Examples
Princton University (USA). Library. Human Resources
Princton University (USA). Dept. of Biology. Human Resources

In the above example, when the intermediate body (highlighted in bold) drops out, the corporate creator is the same. *Do not predict the conflict.*

In some cases, state names can be provided in abbreviated forms,

e.g.

Examples

Subsecretaria de Planejamento e Orcamento, Brasilia, DF (Brazil)

City names which repeat as part of the name of the main element are, in general, omitted.

e.g.

Examples

University of Kabul (Afghanistan)

Enter the names of the city in its English form

e.g.

Original	Correct Entry
Muenchen	Munich
Roma	Rome
Moskva	Moscow

Always indicate the location, place and country, at the end of the names of the corporate body or its main institution.

Enter the corporate creator in the **language** of the **corporate body**. In the case of an **international organization** where **no country is easily identified**, enter its official acronym instead of its location, preferring the English, French or Spanish form in this order of preference.

Capitalize all letters of the **acronym**. Do not leave spaces between the letters of an acronym and do not separate those letters with full stops,

e.g.

Examples	
ASEAN	Association of South-East Asian Nations
BENELUX	Benelux Economic Union
CAB	Commonwealth Agricultural Bureau
CENTO	Central Treaty Organization
ECA	Economic Commission for Africa
ECAFE	Economic Commission for Asia and the Far East
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ECOSOC	Economic and Social Council
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade

IAEA	International Atomic Energy Agency
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
ICJ	International Court of Justice
ICSC	International Civil Service Commission
IEA	International Energy Agency
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization; International Labour Office
IMF	International Monetary Fund
IMO	Intergovernmental Maritime Organization
IMO	International Maritime Organization
ITU	International Telecommunication Union
NATO	North Atlantic Treaty Organization
OAS	Organization of American States
OAU	Organization of African Unity
OECD	Organization for Economic Co-operation and Development
ONU	United Nations University
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Co-ordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICER	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UNRISD	United Nations Research Institute for Social Development
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near
	East
WHO	World Health Organization

Abbreviations

Examples of words and names which may be abbreviated within the corporate headings, but never when they constitute the first word of the name. Retain these words.
e.g.

Example	Abbreviation
Akademia Nauk	AN
Aktiebolaget	A.B.
Aktiengesellschaft	A.G.
Brothers	Bros.
College	Coll.
Company	Co.
Corporation	Corp.
Department	Dept.
Division	Div.
Incorporated	Inc.
Institute	Inst.
Laboratories	Labs.
Laboratory	Lab.
Limited	Ltd.
University	Univ.

Use upper and lower case characters according to the language in which the corporate creator is entered. For example, for English and Spanish, capitalize the initial letter of the first and of all significant worlds, for French capitalize the initial letter of the first word and of proper nouns.

When **multiple corporate creators** are indicated in your resource, **all** of these names should be entered in your record.

Note: All the above rules hold for entering affiliations. Affiliations are always given between parentheses, e.g.

Examples

Brown A. (Bogor Agricultural Univ. (Indonesia). Centre for Developing Studies)

Firm Names

If the name of a **corporate body**, such as a laboratory, research centre, hospital, foundation or university, begins with a personal forename and/or the initials of a forename, enter the name in the normal order of wording.

e.g.

Examples	
Arthur D. Little Inc.	
James Ewing Hospital, New York (USA)	

4.3.3 Conference <ags:creatorConference />

Definition

Conferences are named meetings of individuals or representatives of various bodies for the purpose of discussing and acting on topics of common interest, or meetings of representatives of a corporate body that constitute its legislative or governing body.

Purpose

It allows for locating resources based on conference, for example, all resources from "International Symposium on Animal, Plant, and Microbial Toxins".

Selecting conferences

This is required filed when the resource type is:

- · Conference proceedings or proceedings of any type of meeting, symposium, seminar, etc.
- Papers given at conferences published in a monograph or in a journal
- Abstracts of papers given at conferences (in this case if an electronic format of the abstract is available, it should be provided in Description/Abstract)

Rules for Encoding Creator Conference

In the case of conference information, it should be entered in the following sequence:

Number of the conference. Name of the conference, place (country), date of conference

Rules for encoding Conference

Selecting the Name

Enter in this field the name of the **conference**, **symposium**, **workshop**, **seminar** or any kind of **meeting** of which your resource constitutes the proceedings, a paper, a series of papers, or summaries. e.g.

Examples

International Symposium on Animal, Plant, and Microbial Toxins

Transcribe the name of the conference in full in its official and most complete form. Sometimes, names of the conferences are shortened when given in titles. e.g.

Original Entry	Correct Entry
ISAPM	International Symposium on Animal, Plant, and Microbial Toxins

Provide the Conference name in the language it is available. Follow the rules for capitalization of corporate creators.

Named and Unnamed conferences

The name of the conference should be formally presented in the resource and not created by the cataloguer. e.g.

Named Conference : On Title Page	Unnamed Conference : In text
International Conference on Food Security	"Late last year there was a national
and International Cooperation. May 3-7,	conference on food security and
2000, Bogota, Colombia.	international cooperation"

Rules for encoding Conference Number

The conference number is mandatory when available. Use **Arabic numerals** followed by a period. e.g.

Correct	Incorrect
1.	1 st
2.	Second
12.	12eme
20.	XX

Rules for encoding Conference Place

The conference place and country is mandatory when available. Enter the name of the place in which the conference was held. The place should include the name of the locality (city or town or institution) followed by the element required to identify that locality unequivocally. The place must always be followed by the name of the country in which the meeting was held.

No Place

If no other place is available include at least the name of the country. The names of the country should come from the AGROVOC Thesaurus.

Separate place elements with a comma and a space. Enclose the name of the country between parentheses.

e.g.

Examples	
Washington, D. C. (USA)	

If the conference was held in more than one place, all places are recorded in separate conference fields. e.g.

Examples	
Vienna (Austria)	
Rome (Italy)	

Rules for encoding Conference Date

The conference date is mandatory when available.

Enter in this field the date(s) on which the conference was held. The date consists of day-month-year.

If a range of dates is indicated show both the beginning and the end date. Dates within the same month are connected by a hyphen without spaces; dates which are in successive months are connected by a hyphen between spaces.

Convert all numbers to Arabic numerals.

e.g.

Examples	
25 Aug 2000	
19 Jun-4 Jul 1976	
29 Dec 1979-2 Jan 1980	

4.4 Imprint: Publisher Name, Place of Publication, Date of Publication

Summary

4.4.1 Publisher Name <ags:publisherName />

Definition Purpose

Rules for encoding Publisher Name

Selecting the Publisher Name

Multiple Publishers

Form of Name

Items Published by One Institution for Another

Lack of Publisher

4.4.2 Place of Publication <ags:publisherPlace />

Definition Purpose

Rules for encoding Publisher Place

Selecting the Publisher Place

Additional Addresses

Form of Place of Publication

Lack of Place of Publication

4.4.3 Date of Publication <dcterms:issued />

Definition

Purpose

Rules for encoding Publisher Date

Selecting the Date

Form of Date

Arabic numbers

Range of Dates

Patent Documents

4.4.4 Special Rules for parts of a whole

Summary

Notes	Imprint information is entered into three fields: Publisher, Publisher/Place, and Date/Issued.
Corresponding Tags	ags:publisherName
	ags:publisherPlace
	dcterms:issued
Data type	String
Obligation	Mandatory if available
Maximum Occurrence	Repeatable
Attributes	

4.4.1 Publisher Name <ags:publisherName />

Definition

A publisher is the individual, group, or organization named in the document as being responsible for that document's publication, distribution, issuing, or release.

Purpose

This element provides the name of the individual, group, or organization which controls or publishes the item. It allows for identification of a resource.

Rules for encoding Publisher Name

Selecting the Publisher Name

Enter the name of the publisher in the form found on the item, except in the cases outlined below. [See: Special Rules in 4.4.4]

Multiple Publishers

Enter the **names** of the **publishers** in separate fields. The publisher name must coincide with the place of publication given in the Publication/Place, which again should be situated in the country of the resource centre.

e.g.

Examples

Publisher Name: Oxford University Press Publisher Place: Oxford (United Kingdom)

Publisher Name: Lang

Publisher Place: Berlin (Germany)

Form of Name

Copy the name of the publisher as given on the resource, but omit such words as "Incorporated, Sons, Limited" etc. Also omit such phrases as "Published by".

Use an acronym or an abridged form of the name of the publisher in this field if the publisher's name is identical with the Corporate Creators entered in <ags:creatorCorporate />.

Items Published by One Institution for Another

When an item has been published by one institution on behalf of another, enter this information. e.g.

Examples
CAB for FAO

Lack of Publisher

When there is no publisher, leave the field blank.

Note: Do not substitute the name of the publisher with that of a printer when no publisher is given.

4.4.2 Place of Publication <ags:publisherPlace />

Definition

The place of publication of an item is the city, town, or other locality associated with the name of the publisher entered in the Publisher field.

Purpose

To more accurately distinguish the entity given in the Publisher field and to give an idea of the origins of the document.

Rules for encoding Publisher Place Selecting the Publisher Place

Enter in this field the place and country of the publisher indicated in the Publisher field.

Additional Addresses

If a publisher has several addresses or if several publishers in two or more countries are given, the place and country of publication will be either

- · that of the publishers given typographic pre-eminence or
- that of the publishers listed first.

e.g.

Original Publisher Information on the resource	Correct Entry
New York, London, McGraw-Hill	Publisher Name: McGraw-Hill Publisher Place: New York N.Y.(USA)
	Publisher Place: London (United Kingdom)

Form of Place of Publication

The place must include the name of the locality (city or town) followed by any element required to identify that locality unequivocally (state, county, etc.).

Copy the name of the locality as it appears on the publication, transliterated, if required. Abbreviate names of states, counties, etc. according to local use.

Add to the name of the locality the name of the country and enclose it between parentheses.

Lack of Place of Publication

When **no place** is mentioned on the item, supply one (e.g. by consulting a reference work) and enter it in parentheses.

e.g.

Examples	
(Manila) (Philippines)	

Also, if there is nothing else, use the place of the institution associated with the creator.

e.g.

Examples	Correct Entry	
For example, there is no publisher or place of publication, but the	Portugal	
author is associated with an institute in Portugal.		

If no place is given, supply one, if it can be easily identified, or add "[sl]" or "[np]". e.g.

Examples	
[sl] (Australia)	
[sl] (USA)	

4.4.3 Date of Publication <dcterms:issued />

Definition

Date when the resource was made available to the public.

Purpose

It allows for discovery and distinction between resources.

Rules for encoding Publisher Date Selecting the Date

If the date of issue is different from stated date of publication, and if it is of great importance, e.g. for taxonomic publications, it can be repeated. If it is unclear, based on your judgement, place it in the Notes filed.

Form of Date

The date is standardized, abbreviated and entered in one of the following formats:

- · day month year
- · season year
- · month year
- year

The year is expressed by a four digit numeral.

Express the name of the month or season in abbreviated form.

Arabic numbers

Use Arabic numerals only, and convert any non-Gregorian date to the corresponding Gregorian date.

Range of Dates

If a range of dates is given, as may be the case with journals or with multi-volume monographs, show both the beginning and the end date. Spaces are omitted if days, months or years are standing next to each other.

e.g.

Examples	
1-5 Feb 1997	
Jan-Feb 1997	
1996-1997	

First quarter, second quarter, etc. is expressed as,

e.g.

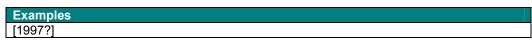
Examples	
Jan-Mar	
Apr-Jun	

If the date has been estimated by the cataloguer, enclose it between square brackets,

e.g.



A question mark may be used after the year if the date is estimated but uncertain, e.g.



Here are some more examples of encoding the date of publication.

e.g.

Original Date	Entered Date
8 Janvier 1997	8 Jan 1997
I-XXIII cervna 1996	1-23 Jun 1996
1-15 February 1997	1-15 Feb 1997
April/June 1996	Apr-Jun 1996
From 20th March to 15th April 1995	20 Mar - 15 Apr 1995
Diciembre 1996- Enero 1997	Dic 1996 - Ene 1997 or Dec 1996 - Jan 1997
1985 to 1995	1985-1995
Spring 1997	Spr 1997
Winter 1996	Win 1996
Estimated date	[1996] or [1996?]

Patent Documents

For patent documents the date may refer to the date of publication or to the date of the filing application. If both are given on the resource enter the date of publication as Date Issued and the filing date in the note field.

For patents published in journals, the **chronological designator (date)** must be entered in the Citation/Date field (<u>See 4.14.4</u>). If also a **filing application date** of the patent is given, enter it in the Description/Notes field (<u>See 4.6.1</u>).

The date of the issue of the journal must be given in the date issued field.

4.4.4 Special Rules for parts of a whole

Analytics of Monographs - related using Relation element

When cataloguing individual parts from a monograph, do not add publication information (imprint information) at the part level instead at the Monograph Level. Publication information is only entered at the monograph level.

Note: Edition statements expressed as dates for all monographically described materials are entered in the Description/Edition field (See 4.6.2).

Analytics of Serials

For the dates associated with serials, see citation (<u>See 4.14.4</u>). In the date issued field, provide the date of publication.

Subject: Classification and Thesaurus 4.5

Summary

4.5.1 Subject <dc:subject />

Definition

Purpose

Rules for encoding Subject

4.5.2 Subject Classification <ags:subjectClassification /> Definition

Purpose

Subject schemes

<u>4.5.3</u> <u>Subject Thesaurus <ags:subjectThesaurus /></u> <u>Definition</u>

Purpose

Rules for encoding subject Thesaurus

Indexing resources

Possible Thesauri

Summary

Notes	Enter in this field the subject information about the resource. It can be free-text, come from a controlled vocabulary or a classification scheme.		
Corresponding Tags	dc:subject ags:subjectClassification [recommended to provide classification scheme] ags:subjectThesaurus [recommended to provide xml:lang and Thesaurus scheme]		
Data type	String		
Obligation	Mandatory		
Maximum Occurrence	Repeatable		
	xml:lang	Mandatory	 Select values from ISO639-2 list Mandatory for dc:subject and ags:subjectThesaurus.
Attributes	scheme	Mandatory when a controlled vocabulary is used.	Provide the URI or Label of the scheme used.

The subject field in this application profile allows for free-text subject values as well as controlled vocabularies and classification schemes.

If your application uses

- Free text, <u>See 4.5.1</u>.
- Classification schemes, <u>See 4.5.2</u>.
- Controlled vocabularies, <u>See 4.5.3</u>.

4.5.1 Subject <dc:subject />

Definition

The topic of the content of the resource.

Purpose

This field is used to provide free-text keywords, which are not taken from a controlled vocabulary or classification scheme.

Rules for encoding Subject

The dc:subject field should be used when indicating terms which do not come from a specific thesaurus or a classification scheme.

The keywords provided in the dc:subject field will be considered for inclusion in the AGROVOC.

4.5.2 Subject Classification <ags:subjectClassification />

Definition

A system of classifying information resources whereby main classes and sub-classes are designated by codes.

Purpose

The field is used to provide the subject category which describes the content of the resource. It allows for systematic arrangement and browsing of resources.

Subject schemes

The subject categories can be selected, preferably, from AGRIS/CARIS Categorisation Scheme.

Other possible classifications schemes are:

e.g.

Name	Label	URI
AGRIS Subject Categories	ASC	http://www.fao.org/agris/
CABI Codes	CABC	http://www.cabi-publishing.org/
Dewey Decimal Classification	DDC	http://www.oclc.org/dewey/index.htm
Library of Congress Classification	LCC	http://lcweb.loc.gov/catdir/cpso/lcco/lcco.html
Universal Decimal Classification	UDC	http://www.udcc.org/

If you would like to use your own classification scheme, instead of those provided above, provide the URI as the scheme.

e.g.

Example
<pre><ags:subjectclassification scheme="http://www.myclassification.com"></ags:subjectclassification></pre>
X78

4.5.3 Subject Thesaurus <ags:subjectThesaurus />

Definition

A classified list of terms or keywords for use in indexing and information retrieval.

Purpose

The field is used to provide keywords which describe the content of the resource. It allows for consistent access to information resources regardless of the language of the resource.

Rules for encoding subject Thesaurus

This field is used to provide descriptors from a controlled vocabulary.

Indexing resources

AGRIS Guidelines for indexing are available at:

Language	URI	
English	ftp://ext-ftp.fao.org/GI/agris/pdf/indguide/indguide.pdf	
Spanish	ftp://ext-ftp.fao.org/GI/agris/pdf/indguide/indguids.pdf	
Russian	ftp://ext-ftp.fao.org/GI/agris/pdf/indguide/indguidr.pdf	

However, each institution can use its own guidelines.

e.g.

Example
<ags:subjectthesaurus scheme="http://www.fao.org/agrovoc"></ags:subjectthesaurus>
livestock

Possible Thesauri

Users have the choice of following Schemes to apply.

Name	Label	URI
AGROVOC	AGROVOC	http://www.fao.org/agrovoc/
CABI Thesaurus	CABT	http://www.cabi-publishing.org/
Aquatic Sciences and	ASFAT	http://www.csa.com/helpV3/ab.html
Fisheries Abstracts Thesaurus		
National Agricultural Library of	NALT	http://agclass.nal.usda.gov/agt/agt.htm
United States		
Medical Subject Headings	MeSH	http://www.nlm.nih.gov/mesh/meshhome.html
Library of Congress Subject	LCSH	http://lcweb.loc.gov/cds/lcsh.html#lcsh20
Headings		

If you would like to use your own thesaurus scheme, instead of those provided above, provide the URI as the scheme.

e.g.

Example

<ags:subjectThesaurus scheme="http://www.mythesaurus.com" > distilled water

</ags:subjectThesaurus >

4.6 Description: Notes, Edition, Abstract

Summary

4.6.1 Notes <ags:descriptionNotes />

Definition
Purpose
Rules for Encoding Notes
Standard Notes
Special Notes

Summaries (Item Has a Summary) Summaries (Item Is a Summary) Theses (Academic Degree)

4.6.2 Edition <ags:descriptionEdition /> Definition

Definition
Purpose
Rules for encoding Edition

4.6.3 Abstract <dcterms:abstract />

Definition
Purpose
Rules for encoding Abstract
Guidelines for Formulating the Abstract

Notes	Use description and its refinements to indicate different descriptive aspects of the resource.		
Corresponding Tags	dc:description ags:descriptionNotes ags:descriptionEdition dcterms:abstract		
Data type	String		
Obligation	Optional		
Maximum Occurrence	Repeatable		
Attributes	xml:lang Mandatory if available • Select values from ISO639-2.		

Description information is entered into three fields: Notes, Edition, and Abstract.

4.6.1 Notes <ags:descriptionNotes />

Definition

A brief statement, annotation, comment, or elucidation concerning any aspect of the resource. Information in a general note is information about the item that the cataloguer has deemed important to add to the record.

Purpose

This field is used for the following notes, and any additional notes that, in the cataloguer's opinion, are needed to draw attention to significant information about the item that was not brought out in the remainder of the record.

Rules for Encoding Notes

Enter as a note any information deemed **necessary for the identification of the item**. Certain notes may be entered in prescribed ways (see below). If a specific note is not mentioned, use cataloguer's judgment in formulating the note.

Standard Notes

Some notes are expressed in standard format to allow searching of this field by computer. Other notes may be entered in any preferred style but they should be concise. Repeat the note field for each note. The most frequent annotation of notes is listed in the following table.

English	French	Spanish	
Academic Degree			
(see below)			
also issued as	aussi public comme	también publicado como	
also issued in	aussi public en	también publicado en	
Author variant			
bibliography	bibliographie	bibliografía	
chiefly tables	nombreux tableaux	principalmente tablas	
colour	couleur	color	
dictionary	dictionaire	diccionario	
glossary, glossaries	glossaire, glossarires	glosario, glosarios	
graph, graphs	carte, cartes	mapa, mapas	
min.	min.	min.	
ref.	ref.	ref.	
scale, scales	echelle, echelles,	escala, escalas	
sound, sd.	tableau, tableaux	tabla,tables	
Summary only/Summaries	Resumé seulement/	Sumario solamente,	
only (see below)	Resumés seulement	Sumarios solamente	
Summary/Summaries	Resumé/Resumés	Sumario/Sumarios	
(see below)			
translation	traduction	traducción	

Special Notes

Summaries (Item Has a Summary)

Enter summary statements into this field in the form:

the word Summary or Summaries (or its equivalent in any other language) and the code(s) of the respective language(s) between parentheses. Use the List of language codes given in ISO639-2 [8]. If there is no appropriate language code is available enter the name of the language in full.

e.g.

Examples
Summaries (Es)
Resumé (Fr, Fi, Da)

Include the language of the summary even if it is in the same language as the item.

Summaries (Item Is a Summary)

If the **text consists only of a summary,** an abstract, a short communication, a corresponding statement should be entered in this field in the form **Summary only** or **Summaries only** or their its equivalent in any other language. In this case, the language of the summary should be in the dc:language field, e.g. item is a summary in English

e.g.

Examples	
Item is in English and the note is in French.	Note: Resumés seulement
	Language: Fr
Item is in Vietnamese and the note is in	Note: Resumés seulement
French.	Language: Vi

Do not confuse Summary notes with Abstracts.

Theses (Academic Degree)

Enter the indication of the type of document (thesis, dissertation, etc.) and the academic degree granted for it. The degree is typed in full or abridged, according to local convention and is enclosed between parentheses.

Make sure that you enter the institution which awarded the academic degree (usually a university) in Creator/corporateAuthor.

Examples	
Thesis submitted to the Graduate College of the University of Illinois in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Horticulture.	Corporate Creator: University of Illinois, Urbana (USA). Graduate College Description/Note: Thesis (PhD in Hort.)
Thèse présentée à la Faculté des Sciences de l'Université de Grenoble pour obtenir le grade de Docteures-sciences physiques	Corporate Creator: Universite de Grenoble (France). Faculte des sciences Description/Note: These (Docteur essciences phys.)
Inaugural Dissertation zur Erlangung des Doktorgrades im Fachbereich der Veterinaermedizin der Johann Wolfgang Goethe Universitaet zu Frankfurt am Main	Corporate Creator: Johann Wolfgang Goethe Univ., Frankfurt am Main (Germany) Description/Note: Inaugural-Diss. (Dr. Vet.)

4.6.2 Edition <ags:descriptionEdition />

Definition

Edition is the formally designated version of the data set or information resource being described. An edition is known by a word or phrase appearing in the item that normally indicates a difference in either content or form, and it denotes the existence of other versions of the work.

Purpose

This allows distinction between two resources with similar metadata.

Rules for encoding Edition

This field should be completed **only when an edition statement appears on the resource**. This may include dates. The edition statement has a standard format and may **only include Arabic numerals**, e.g.

Statement on resource	Correct Entry
2 éme edition complètement revue et augmentée	2.
II völlig erweiterte und neubearbeitete Ausgabe	2.
7 th edition	7.
tercera edición	3.
2001 edition	2001

Do not provide an edition statement for the first edition of a publication.

Drafts are not edition statements. If it is considered necessary to record this information, put it into Description/Note.

4.6.3 Abstract <dcterms:abstract />

Definition

An abstract is a summary of a document designed to give the user a clearer idea about the document's contents. It should be intelligible in itself, without reference to the paper, but it is not intended to substitute for the resource itself.

Purpose

An abstract should be a non-critical, informative digest of the significant contents and conclusions of the resource. A well-prepared abstract helps readers to decide whether a publication covers subjects that are of interest to them.

Rules for encoding Abstract

Enter in this field the abstract of the resource. An abstract is not mandatory but should be supplied whenever possible. You may either copy abstracts which are available in the resource or you may compose your own.

The abstract field must come with a language attribute which indicates the language or languages in which the abstract is. Enter the language code from the ISO639-2 language code.

Guidelines for Formulating the Abstract

Whenever possible, an abstract should state the purpose, methodology, results and conclusions presented in the original document. Unfamiliar terms, trade names, acronyms, abbreviations or symbols should be defined when used in an abstract.

Apply the following criteria in preparing abstracts:

- Do not begin the abstract by repeating the title.
- · Abstracts are written as one single paragraph without columns, tables, or graphs.
- For practical purposes, the maximum length of a single abstract should generally not exceed 2000 characters. An average length of 200 to 250 words is recommended. If longer abstracts are available within the original document they may be edited or compressed.
- Here are some suggestions on how to encode special symbols, e.g. chemical formulas, mathematical expressions.
 - o Ignore subscripts in chemical formulas, (see IUPAC rules [11])

e.g

Example	Suggested Encoding
H ₂ SO ₄	H2SO4

 Use computer nomenclature for mathematical formulas e.g.

Example	Suggested Encoding
10 ⁻³	10E-3
a ^b	a**b
Σa _i	sum(ai)
∫ x dx	int(x dx)
a _{i+1} j-2	a sub(i+1)sup(j-2)

Use full text if appropriate e.g.

Example	Suggested Encoding
25 ° C	25 deg C
m ²	square m

• Several versions in different languages may be provided in repeated abstract fields.

4.7 Identifier

Summary

4.7.1 Identifiers (Standard Numbers) <dc:identifier /> Definition

Purpose

International Patent Classification (IPC)
Patent Number (PN)
ISBN

ISSN

Job Number

Report Number

Report Numbers in multiple parts

Other Numbers on the Item

Notes	The identifiers help locate or/and identify a resource.			
Corresponding Tags	dc:identifier	dc:identifier		
Data type	String			
Obligation	Mandatory if available			
Maximum Occurrence	Repeatable			
Attributes	scheme	Mandatory	•	When applicable provide the scheme name to associate the identifier correctly (See Below)

There can be many numbers assigned to a document. This field is reserved for standard numbers taken from the item. Some of the numbers may be input in authorized form. For web resources, the URI (electronic address starting with: for ex. http:// or ftp://) is also placed in this field.

Numbers assigned by cataloguing institutions for internal purposes are **not** entered here, but placed into the *Availability* field (See 4.12).

4.7 Identifiers (Standard Numbers) <dc:identifier />

Definition

Identifiers (Standard numbers) are numbers taken from the item with exceptions mentioned below. They can be ISSN, ISBN, Patent numbers and other numbers **not** assigned by the cataloguing agency.

Purpose

This field is used to enter numbers which can give unambiguous access to the document. There often will be two or more Identifiers and they should be all entered whenever available. Each Identifier **must** be accompanied by the scheme it uses for value formatting. Some of the commonly used schemes may be:

Scheme	Obligation	Applicability Conditions
IPC	MA	
ISBN	MA	Book
ISSN	MA	International Standard Serial Number
JN	MA	Job Number
PN	MA	Patent Number
RN	MA	Report Number
URI	MA	when a resources is also electronically available.

Note: MA is Mandatory if Available

International Patent Classification (IPC)

The International Patent Classification is the code assigned to a patent or patent-like document by many national industrial property offices and is identified by WIPO/INID Code 51⁴.

If cited, the IPC code is recorded as given on the patent document and is preceded by the abbreviation "Int. CI." and a space.

Examples
Int. Cl. G21d3/02
Int. Cl. G21d3/05

Enter multiple codes in separate fields.

_

e.g.

⁴ World Intellectual Property Organization (WIPO), Geneva (Switzerland). WIPO Handbook on Patent Information and Documentation. 4 vols. July 1982-October 1986. http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=4084

Note: In the absence of International Patent code, a domestic code maybe entered in this filed. A national code is preceded by the abbreviation "Nat. Cl. "

Patent Number (PN)

The format of this field consists of the following parts:

name of the country in which the document is issued, phrase 'patent document', patent number, /WIPO letter code/

First enter the standardized adjective of the country name in which the patent document is issued followed by a space. Next enter the phrase **patent document** followed by a space. Then enter the patent number as it appears on the resource. Finally enter a slash, the appropriate WIPO letter code [see footnote], and another slash as shown in the following examples. If the letter code is followed by a number, such as 1 or 2, the number should also be entered. If the code is not given in the resource, omit the WIPO letter code input,

e.g.

Examples
German patent document 28223/C/
Czech patent document 235407/B1/
Ukrainian patent document 341267

ISBN

The International Standard Book Number is recorded in this field as a ten-digit code. The code is recorded as given on the unit (retain the hyphens).

e.g.

Examples		
ISBN	0-571-0898-9	
ISBN	90-7000-234-5	

Note: National standard book numbers are not entered.

ISSN

The International Standard Serial Number is recorded in this field as an eight-digit code (retain the hyphen). e.g.

Examples					
ISSN	0029-0254				

Job Number

The Document Job Number is used to enter numbers assigned to FAO documents and publications. The document job number is usually found either on the front or on the back of the item, e.g.

Examples W/P4495/E/9.81/1/500

Note: Enter only the second element of the number. In this example: P4495.

Report Number

This number is an alphanumeric identification assigned to a report by the organization which issued it.

Enter in this field any report numbers given on the resource. Report numbers may be standardized. If more than one report number is assigned, they may be entered in repeating Identifier fields.

Report Numbers in multiple parts

Occasionally a report is issued in several parts or in several editions. The relevant statement is then made in parentheses immediately after the report number using the following list of abbreviations, e.g.

Examples
TID2236 (pt.1)
TID11295(ed.4)
ORNL3904(rev.)

Term	Abbreviation
Addendum	add.
Amendment	amend.
Appendix	арр.
Book	bk.
Chapter	ch.
Edition	ed.
Number	no.
Part	pt.
Revised, Revision	rev.
Section	sect.
Series	ser.
Summary	summ.
Supplement	suppl.
Volume	V.

URI

Enter the Uniform Resource Identifier, when available. Include the protocol prefix e.g http:// and ftp:// e.g.

Examples	
http://www.fao.org/agris/IP/code.asp?InfoT=Subject&Language=EN	
ftp://ext-ftp.fao.org/Gl/agris/pdf/indguide/indguids.pdf	

Other Numbers on the Item

Normally, ignore other numbers on the item. If the cataloguer decides that a particular number may be important for identification purposes and it is not mentioned here, enter it in Description/Notes (See 4.6.1).

4.8 Type

Summary

4.8.1 Type <dc:type /> Definition Purpose Selecting Value for Type

Notes	Although it is not mandatory, the type value should be provided when possible.
Corresponding Tags	dc:type
Data type	String
Obligation	Optional
Maximum Occurrence	Repeatable
Attributes	

4.8.1 Type <dc:type />

Definition

The nature or genre of the content of the resource.

Purpose

Type helps describe the general categories, functions, genres, or aggregation levels for content of the resource.

Selecting Value for Type

Recommended best practice is to select a value from a controlled vocabulary (for example, the Dublin Core Types⁵). To describe the physical or digital manifestation of the resource, use the Format element (See 4.9).

⁵ The Dublin Core Type Vocabulary http://www.dublincore.org/documents/2000/07/11/dcmi-type-vocabulary/

4.9 Format

Summary

4.9.1 Extent <dcterms:extent /> Definition

Purpose
Rules for Encoding Extent
Print resources
Digital resources

4.9.2 Medium <dcterms:medium /> Definition

Definition
Purpose
Rules for encoding Medium

Notes	The extent field is used to indicate the size or duration of the resource. The medium field is used to indicate the material or physical carrier of the resource.
Corresponding Tags	dc:format
	dcterms:extent
	dcterms:medium
Data type	String
Obligation	Optional
Maximum Occurrence	Repeatable
Attributes	

4.9.1 Extent <dcterms:extent />

Definition

The size or duration of the resource.

Purpose

Extent may include the duration or the dimensions of the resource.

Rules for Encoding Extent Print resources

The extent information should relate to the resource at hand.

e.g.

Examples of Extent		
no. 9		
p. 36-39		
p. 785-792		
p. B16-B25, C30-C39		
xxii, 200 p.	leave the original pagination	
21 p.	Roman numbers to Arabic numerals	
·	e.g. xxi pages	
to suppl. 1	Ordinal numbers to cardinal numbers	
	e.g. premier supplément	

Digital resources

It is important to realize that the volatility of remotely accessed electronic resources will cause the extent statements to change. For ex. When a word file is changed to XML. e.g.

Type of resource	Correct entry for Extent	Description/Notes
Films	I9 min.	sound
	35mm	colour
sound recordings	28 min.	
CD-ROM	2 CDs	
Online resources	1 Web Site	
Online resources	1 Web Page	
Word File	345 KB	
MPEG	2 MB	
PDF	20 KB	

4.9.2 Medium <dcterms:medium />

Definition

The material or physical carrier of the resource.

Purpose

Format may be used to determine the software, hardware or other equipment needed to display or operate the resource.

Rules for encoding Medium

For printed resources, do not use medium.

For non-print resources, **use** medium to indicate the physical carrier. e.g.

Example of resource	Format/Medium	Format/Extent	Description/Notes
4 Videocassettes in PAL, 35 min. long	Videocassettes	4 Videocassettes 35 min.	PAL

Some examples for medium are shown below:

e.g.

Examples of resource	
Microfilm	
Microfiche	
/CD	
DVD	
Audiotape	
Reel	
ilm	
ape ape	
CD-ROM	
/ideocassette	
/ideodisc	
/ideotape	

The internet media types $[IMT]^6$ can also be used to indicate the hardware or software required to access the resource.

⁶ The Internet media type of the resource. http://www.isi.edu/in-notes/iana/assignments/media-types/media-types

4.10 Language

Summary

4.10.1 Language <dc:language /> Definition Purpose
Selecting the Language
Computer Language
Parts of a whole

Notes	For this field, it is recommended to enter the three letter code from ISO639-2. If your local system does not allow you to provide the 3 letter code, enter the two letter code, indicating the scheme as ISO639-1[8]. If a language does not have a code in the selected scheme, enter the full form of the language and indicate the scheme as "noscheme".				
Corresponding Tags	dc:language				
Data type	String				
Obligation	Mandatory				
Maximum Occurrence	Repeatable				
	scheme Mandatory • ISO639-1				
Attributes			• ISO639-2		
			noscheme		

4.10.1 Language <dc:language />

Definition

A language of the intellectual content of the resource.

Purpose

This is used to indicate the language(s) in which the resource is available.

Selecting the Language

Language is a mandatory element for all types of resources, including those in which the text is only a summary.

Enter in this field a three-letter code (ISO639-2) to indicate the language in which the text of the item appears. If the resource contains more than one languages, repeat the language element. e.g.



Computer Language

For computer languages (ex. C++, Java, Basic), indicate them in Format/Medium.

Parts of a whole

Record describing a whole resource containing separate articles, some in English, others in French. e.g.



Single part from the above resource

e.g.



4.11 Relation

Summary

4.11.1 Relation <dc:relation /> Definition

Definition Purpose

Rules for encoding Relation Parts of a Whole

4.11.2 Relation Refinements

Notes	This field is used to link one resource to another.
Corresponding Tags	dc:relation
	dcterms:ispartof
	dcterms:haspart
	dcterms:isversionof
	dcterms:hasversion
	dcterms:isformatof
	dcterms:hasformat
	dcterms:references
	dcterms:isreferencedby
	dcterms:isrequiredby
	dcterms:requires
	dcterms:isreplacedby
	dcterms:replaces
	ags:hastranslation
	ags:istranslationof
Data type	String
Obligation	Optional
Maximum Occurrence	Repeatable
Attributes	

4.11.1 Relation <dc:relation />

Definition

A reference to a related resource.

Purpose

This allows the establishment of various relationships between resources and for users to locate related resources.

Rules for encoding Relation

Recommended best practice is to reference the resource by means of a URI conforming to a formal identification system.

Parts of a Whole

When the resource is a part of a whole, the information of the **whole should be made available either** by providing a URI. If you have more information about the whole, put this information in the source field.

4.11.2 Relation Refinements

When using any of the following refinements, it is important to establish the type of relationship by choosing a value from one side of any of the following pairs of relation refinement types, shown in the following list:

Relation refinement	Description
(DC) isPartOf	The described resource is a physical or logical part of the referenced
	resource.
(DC) hasPart	The described resource includes the referenced resource either
	physically or logically.
(DC) isVersionOf	The described resource is a version, edition, or adaptation of the referenced resource. Changes in version imply substantive changes in content rather than differences in format
(DC) hasVersion	The described resource has a version, edition, or adaptation, namely,
	the referenced resource.
(DC) isFormatOf	The described resource is the same intellectual content of the

	referenced resource, but presented in another format.
(DC) hasFormat	The described resource pre-existed the referenced resource, which is
	essentially the same intellectual content presented in another format.
(DC) references	The described resource references, cites, or otherwise points to the
	referenced resource.
(DC) isReferencedBy	The described resource is referenced, cited, or otherwise pointed to by
	the referenced resource.
(DC) isRequiredBy	The described resource is required by the referenced resource, either
	physically or logically.
(DC) requires	The described resource requires the referenced resource to support its
	function, delivery, or coherence of content.
(DC) isReplacedBy	The described resource is supplanted, displaced, or superseded by the
	referenced resource.
(DC) replaces	The described resource supplants, displaces, or supersedes the
	referenced resource.
(AGS) hasTranslation	The described resource has a translation, namely, the referenced
	resource.
(AGS) isTranslationOf	The described resource is a translation of the referenced resource.

4.12 Availability

Summary

4.12.1 Availability <agls:availability />

Definition Purpose

4.12.2 Location of availability <ags:availabilityLocation />

4.12.3 Availability Number <ags:availabilityNumber />

4.12.4 Special Rules for parts of a whole

Notes	The ags:location is mandatory for every resource. The ags:number field	
	must have accompanying location information.	
Corresponding Tags	agls:availability	
	ags:availabilityLocation	
	ags:availabilityNumber	
Data type	String	
Obligation	Mandatory if available	
Maximum Occurrence	Repeatable	
Attributes		

Note: Availability information is provided in availabilityLocation and availabilityNumber fields.

4.12.1 Availability <agls:availability />

Availability is reserved for locally created numbers not found on the item. This field has two refinements: the Location and the Number.

- For URIs, use Identifier (See 4.7).
- For standard numbers printed on the item, use Identifier (See 4.7).
- For classification numbers, use Subject (See 4.5.2).

Definition

Availability provides users with a number or code that is uniquely associated with an item, and serves to identify that item within an organization. This number is normally assigned by the organization that holds the item. Since this is local information, availability must include the name or code identifying the institution or repository in which the item is housed.

Purpose

To allow users and collection managers to locate a particular item within a collection.

4.12.2 Location of availability <ags:availabilityLocation />

Enter the address of the AGRIS Resource Centre, or the address of the institute where the resource is available. An *authorized form* of the name is preferred, e.g.

Example
University of Vienna, Peter Jordanstr. 52, A-1190 Vienna, Austria

This is a mandatory entry for all resources kept at the resource centres.

4.12.3 Availability Number <ags:availabilityNumber />

Note: If the subject classification number is used for organize resources at your centre, place that number in subjectClassification field, leaving this field empty.

This field is used to give the **accession number or other locally created number** of a resource, e.g.

Example

availabilityNumber: Boku 2456.23

availabilityLocation: University of Vienna, Peter Jordanstr. 52, A-1190 Vienna, Austria

Note: All local numbers must include the corresponding institution.

4.12.4 Special Rules for parts of a whole

Whole

When describing individual parts of a whole, do not add Availability information at the parts level. Availability is entered only at the whole level.

Journal Articles

When describing individual articles from a journal, add the Availability information.

4.13 Source

Summary

4.13.1 Source <dc:source /> Definition Purpose Rules for encoding Source

Notes	Provides additional information about the source of the resource.	
Corresponding Tags	dc:source	
Data type	String	
Obligation	Optional	
Maximum Occurrence	Not repeatable	
Attributes		

4.13.1 Source <dc:source />

Definition

A reference to a resource of which the current resource is a part.

Purpose

When cataloguing the analytic, this field is used to provide information for identification of the Monograph.

Rules for encoding Source

Information that can go into this field includes title of the whole, creators of the whole, identifier (ISBN) etc.

4.14 Citation

Summary

4.14.1 Citation Title<ags:citationTitle />

Definition

Purpose

Rules for selecting Serial Title

Creating Serial title

Distinctive title

Title containing the name of the Issuing body

Title with generic word

Articles

Acronyms and Initials

Acronym is not part of the full title Acronym is the only title present

Numbers

Punctuation

Identical titles

Editions in different languages

Supplements

Serial published within another serial

Parallel titles

4.14.2 Citation Identifier <ags:citationIdentifier />

Definition

Purpose

Rules for encoding citation Identifier

ISSN

4.14.3 Citation Number <ags:citationNumber />

Definition

Rules for encoding citation Number

4.14.4 Citation Chronology <ags:citationChronology />

Definition

Purpose

Rules for encoding citation Chronology

Notes	This is a mandatory entry when the resource is part of a serial. A serial is defined as a publication, usually having numerical or chronological label, and intended to be continued indefinitely. It may be made available on any medium and is issued in successive parts.		
Corresponding Tags	ags:citation		
	ags:citationTitle		
	ags:citationIdentifier		
	ags:citationNumber		
	ags:citationDate		
Data type	String		
Obligation	Mandatory for citationTitle, citationIdentifier		
Maximum Occurrence	Repeatable		
Attributes	xml:lang Mandatory if available • Select the value from ISO639-2 list		

Note: Citation information is provided in citationTitle, citationIdentifier, citationNumber and citationIDate fields.

4.14.1 Citation Title <ags:citationTitle />

Definition

The serial title, also known as the key-title, is a name ascribed to a serial publication and is inseparably associated with its ISSN.

Purpose

The purpose of serial title is to ensure that users can find all issues of a serial under one form of the serial title.

Rules for selecting Serial Title

The serial title is a name ascribed to a serial publication and is inseparably associated with its ISSN. It is derived from the title information appearing in the publication, and it will be entered in the original language, transliterated if necessary.

When a serial has two or more different titles appearing on different parts of the publication (cover, title-page, masthead), put them in the repeating fields. The sub-title is not part of the serial title.

Creating Serial title

Enter in this field the serial title of the serial selected for input from a journal article, or a single volume in a monographic series.

Distinctive title

e.g.

Example
Scientific American
Fortschritte der Physik

Title containing the name of the Issuing body

The title containing the name of the issuing body, which in turn is grammatically inseparable from the rest of the time.

e.g.

Example
Journal of the American Chemical Society
Society of Petroleum Engineers Journal

The name of the issuing body if this is the only title present (transcribed in the sequence and form given).

e.g.

Example

Association des Diplomes Universitaires Scientifiques, Juridiques et Economiques

Title with generic word

A title containing a generic word (a generic word in a serial title is one which indicates the kind and/or periodicity of a publication such as: Abhandlungen, Annals, Berichte, Bulletin, Cahiers, Comptes rendus, Yearbook etc.), which is not grammatically linked to the name of the issuing body. In this case the serial title is to begin with the generic word, followed by the name of the issuing body (transcribed in the sequence and form given) linked by a dash which is preceded and followed by a space (space dash space). e.g.

Example

Bulletin - American Physical Society

Transactions - American Society for Metals

Note that a comma or other punctuation marks are not considered to constitute grammatical links.

Articles

Articles occurring as the first word of a serial title are omitted, except when an article forms part of a place or other name.

e.g.

Example

Los Angeles Medical Society Bulletin

Acronyms and Initials

If the title contains an acronym or set of initials, it should be constructed as follows:

If the acronym is inseparable from the rest of the title it should be retained as part of the serial title. e.g.

Example

IEEE Transactions

ALA Bulletin

The title containing the expanded form of the acronym or initials may be entered in repeating citation title field.

Acronym is not part of the full title

If the title consists of a set of initials prominently displayed, and the expanded form is also present, the serial title will begin with the acronym, followed by the expanded form in parenthesis. e.g.

Example

BLM (Bonniers Literary Magazine)

If the acronym and the expanded form do not match, the same procedure should be followed. e.g.

Example

BPR (American Book Publishing Record)

Acronym is the only title present

If the acronym is the only title present, it should be considered a distinctive title. e.g.

Example

GP

QTC

The expanded form should be entered as a variant title whenever possible.

Numbers

If numbers appear in a title they will be entered in Arabic numerals.

e.g.

Example		
4 Corners Power Review		

If the number appearing in the title is the number of a conference in a series of conferences, it will be omitted in the serial title.

e.g.

Title on the serial	Correct Entry
Tagungsbericht der Oesterreichischen	Tagungsbericht der Oesterreichischen
Gesellschaft fuer Veterinaermedizin	Gesellschaft fuer Veterinaermedizin

Any numbers or other information relating to chronological series designation must be excluded from the serial title, while numbers relating to subject series must be included:

e.g.

Title on the serial	Correct Entry
Nuovo Archivio Veneto. Ser. 2 (1891-1900)	Nuovo Archivio Veneto
Nuovo Archivio Veneto. Ser. 3 (1901-)	

e.g.

Title on the serial	Correct Entry
Bulletin Signaletique. Section 101.	Bulletin Signaletique. Section 101.
Information Scientifique et Technique	Information Scientifique et Technique

Punctuation

Punctuation should be added, if necessary. The full stop should be used as internal divider.

e.g.

Example
Bibliographie. Dokumentation. Terminologie
Journal of Polymer Science. Part A. General Papers

The dash will be used to link generic words and issuing body.

Parenthesis will be used to enclose words added to the title to make it distinctive.

Identical titles

If a serial title, derived as so far defined, is identical with the serial title of another serial, it shall be further distinguished by giving the place of publication (town); and, if necessary, the starting date or any other information needed to make the title distinctive.

This information will appear in parentheses immediately after the main part.

e.g.

Example
Transactions of the Illuminating Engineering Society (London)
Transactions of the Illuminating Engineering Society (New York)

Editions in different languages

When a serial has editions in different languages, and the titles of these editions are identical, each edition will have its own ISSN, provided that a separate serial title is devised. e.g.

Example	
Nouvelles de Paris	
Nouvelles de Paris. English version	
Nouvelles de Paris. Deutsche Uebersetzung	

If this information does not appear on the publication it will be entered in parenthesis.

e.g.

Example

Realites

Realites (English edition)

Supplements

A continuing supplement of a serial will have its own serial title and ISSN.

e.g.

Example

Parent publication: Journal of Mammalogy Supplement: Recent Literature on Mammalogy Parent publication: Main Economic Indicators

Supplement: Industrial Production

If the title of the supplement is identical with the title of the parent publication, it must be made distinctive by adding the word supplement.

e.g.

Example

Solid State Physics. Supplement

Canadian Statistical Review. Weekly Supplement

If this information does not appear on the publication, it will be entered in parenthesis.

Serial published within another serial

When there is a serial published within another serial, or a sub-series other than a continuing supplement, a separate serial title and ISSN will be assigned to it, provided the title is distinctive. e.g.

Example

Serial title of serial: Libri

Serial title of inset: IFLA Communications (also issued as bound volumes)

Serial title of main-series: Actualites scientifiques et industrielles

Serial title of sub-series: Chimie des substances naturelles

Parallel titles

If the serial has two or more titles in different languages, the one given prominence (e.g. printed in large type) is to be used as the basis for the serial title.

The other titles should be placed in additional serial title fields.

Note: When a sequence of appearance is difficult to determine (e.g. separate title-pages, English at front - Arabic at rear), preference should be given to the title that is most related to the place of publication (town).

4.14.2 Citation Identifier <aqs:citationIdentifier />

Definition

A global standard identifier of a journal. This would usually be an ISSN, but may follow some other standards such as CODEN.

Purpose

This is a unique identifier of the serial.

Rules for encoding citation Identifier ISSN

The International Standard Serial Number is recorded in this field as an eight-digit code (retain the hyphen). e.g.

Examples				
ISSN	0029-0254			

4.14.3 Citation Number <ags:citationNumber />

Definition

The issue, part or number which denotes a particular issue of a journal, as it appears on the cover. In many cases this indicates a part of a journal volume.

Rules for encoding citation Number

Issue Numbers are denoted differently in different journals, eg. `part'. Some journals are arranged by year, eg. 12/1999, in which case the year is effectively the volume.

4.14.4 Citation Chronology <ags:citationChronology />

Definition

Chronology is the formal date of a particular issue of a journal, as it appears on the cover in conjunction with the serial title.

Purpose

This date provides additional details about the resource.

Rules for encoding citation Chronology

This may be different from the actual **date of publication** of the issue, which should be encoded in dc:date/dcterms:issued (See 4.4.3).

References:

- [1] Food and Agriculture Organization of the United Nations http://www.fao.org/
- [2] Dublin Core Metadata Initiative http://www.dublincore.org/
- [3] Agricultural Metadata Element Set http://www.fao.org/agris/agmes/
- [4] The Australian Government Locator Service http://www.naa.gov.au/recordkeeping/gov_online/agls/cim/cim_manual.html
- [5] Namespaces in XML http://www.w3.org/TR/REC-xml-names/
- [6] Baker, Dekkers, Heery, Patel and Salokhe (2001) "What Terms Does Your Metadata Use? Application Profiles as Machine-Understandable Narratives". JoDI, Vol 2., Issue 2. http://jodi.ecs.soton.ac.uk/Articles/v02/i02/Baker/
- [7] Heery, Rachel and Manjula Patel (2000) "Application profiles: mixing and matching metadata schemas". Ariadne, No. 25, September. http://www.ariadne.ac.uk/issue25/app-profiles/intro.html
- [8] Codes for the Representation of Names of Languages http://www.loc.gov/standards/iso639-2/langcodes.html
- [9] Codes for the Representation of Countries http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html

Appendix A: DTD

```
<!--
This is a draft DTD Schema for AGRIS AP. It is based on version 1.0 of AGRIS: Guidelines for Description
of Information Objects for the International Information System on Agricultural Sciences and Technology
For Comments: Please write to FAO-Agris-Caris@fao.org with the subject line ATTN: AGRIS-AP
Last Updated: 2003-02-26
<!--<dc:title>AGRIS Metadata Record XML DTD </dc:title> -->
<!--<ags:creator>AGRIS/CARIS and Doc group, FAO of the UN </ags:creator> -->
<!--<dc:description>XML DTD for AGRIS metadata records </dc:description>-->
<!--<dc:date>2003-02-26 </dc:date> -->
<!--<dc:type>XML DTD </dc:type> -->
<!--<dc:format>text/xml </dc:format> -->
<!--<dc:identifier>agris.dtd </dc:identifier> -->
<!--<aqs:descriptionNotes>Based on the Agris User Guidelines (http://www.fao.org/agris/agmes) and on
Dublin Core Metadata Inititiative (http://purl.org/dc/elements/1.1) </ags:descriptionNotes>-->
<!--<dc:language> en </dc:language>-->
<!-- Namespaces URIs declarations -->
<!ENTITY agsns "http://www.fao.org/agris/agmes/schemas/0.1/">
<!ENTITY dcns "http://purl.org/dc/elements/1.1/">
<!ENTITY aglsns "http://www.naa.gov.au/recordkeeping/gov_online/agls/1.2">
<!ENTITY dctermsns "http://purl.org/dc/terms/">
<!-- Convenience entities for XML namespace declarations -->
<!ENTITY % agsnsdecl "xmlns:ags CDATA #FIXED &guot;&agsns;&guot;">
<!ENTITY % dcnsdecl "xmlns:dc CDATA #FIXED &quot;&dcns;&quot;">
<!ENTITY % aglsnsdecl "xmlns:agls CDATA #FIXED &quot;&aglsns;&quot;">
<!ENTITY % dctermsnsdecl "xmlns:dcterms CDATA #FIXED &quot;&dctermsns;&quot;">
<!-- The root element -->
<!ELEMENT agrisResources (agrisResource+)>
<!ATTLIST agrisResource
   arn ID #REQUIRED
<!ELEMENT agrisResource (dc:title*, ags:creator*, dc:publisher*, dc:subject*, dc:description*, dc:identifier*,
dc:type*, dc:format*, dc:language*, dc:relation*, agls:availability*, dc:source*, ags:citation*)>
<!-- ELEMENT title -->
<!ELEMENT dc:title (#PCDATA | dcterms:alternative)*>
<!ATTLIST dc:title
   xml:lang CDATA #REQUIRED
<!ELEMENT dcterms:alternative (#PCDATA)>
<!ATTLIST dcterms:alternative
   xml:lang CDATA #IMPLIED
<!-- ELEMENT creator -->
<!ELEMENT ags:creator (#PCDATA | ags:creatorPersonal | ags:creatorCorporate |</p>
ags:creatorConference)*>
<!ATTLIST ags:creator
   xml:lang CDATA #IMPLIED
<!ELEMENT ags:creatorPersonal (#PCDATA)>
<!ATTLIST ags:creatorPersonal
   xml:lang CDATA #IMPLIED
<!ELEMENT ags:creatorCorporate (#PCDATA)>
<!ATTLIST ags:creatorCorporate
   xml:lang CDATA #IMPLIED
<!ELEMENT ags:creatorConference (#PCDATA)>
```

```
<!ATTLIST ags:creatorConference
   xml:lang CDATA #IMPLIED
<!-- ELEMENT publisher -->
<!ELEMENT dc:publisher (ags:publisherName | ags:publisherPlace | dcterms:issued)*>
<!ELEMENT ags:publisherName (#PCDATA)>
<!ELEMENT ags:publisherPlace (#PCDATA)>
<!ELEMENT dcterms:issued (#PCDATA)>
<!-- ELEMENT subject -->
<!ELEMENT dc:subject (#PCDATA | ags:subjectClassification | ags:subjectThesaurus)*>
<!ATTLIST dc:subject
   xml:lang CDATA #IMPLIED
<!ELEMENT ags:subjectClassification (#PCDATA)>
<!ATTLIST ags:subjectClassification
   scheme (ags:ASC | ags:CABC | dc:DDC | dc:LCC | dc:UDC) #IMPLIED
<!ELEMENT ags:subjectThesaurus (#PCDATA)>
<!ATTLIST ags:subjectThesaurus
   xml:lang CDATA #IMPLIED
   scheme (ags:CABT | ags:AGROVOC | ags:NALT | ags:ASFAT | dc:LCSH | dc:MeSH) #IMPLIED
<!-- ELEMENT description -->
<!ELEMENT dc:description (ags:descriptionNotes | ags:descriptionEdition | dcterms:abstract)*>
<!ELEMENT ags:descriptionNotes (#PCDATA)>
<!ATTLIST ags:descriptionNotes
   xml:lang CDATA #IMPLIED
<!ELEMENT ags:descriptionEdition (#PCDATA)>
<!ATTLIST ags:descriptionEdition
   xml:lang CDATA #IMPLIED
<!ELEMENT dcterms:abstract (#PCDATA)>
<!ATTLIST dcterms:abstract
   xml:lang CDATA #IMPLIED
<!-- ELEMENT identifier -->
<!ELEMENT dc:identifier (#PCDATA)>
<!ATTLIST dc:identifier
   scheme (IPC | RN | PN | ISBN | ISSN | JN | URI) #REQUIRED
<!-- ELEMENT type -->
<!ELEMENT dc:type (#PCDATA)>
<!-- ELEMENT format -->
<!ELEMENT dc:format (dcterms:extent | dcterms:medium)>
<!ELEMENT dcterms:extent (#PCDATA)>
<!ELEMENT dcterms:medium (#PCDATA)>
<!-- ELEMENT language -->
<!ELEMENT dc:language (#PCDATA)>
<!ATTLIST dc:language
   scheme (ISO639-1 | ISO639-2 | noscheme) #REQUIRED
<!-- ELEMENT relation -->
<!ELEMENT dc:relation (dcterms:isPartOf | dcterms:hasPart | dcterms:isVersionOf | dcterms:hasVersion |</p>
dcterms:isFormatOf | dcterms:hasFormat | dcterms:references | dcterms:isReferencedBy |
dcterms:isRequiredBy | dcterms:requires | dcterms:isReplacedBy | dcterms:replaces |
ags:relationHasTranslation | ags:relationIsTranslationOf)*>
<!ELEMENT dcterms:isPartOf (#PCDATA)>
<!ATTLIST dcterms:isPartOf
   scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
```

```
<!ELEMENT dcterms:hasPart (#PCDATA)>
<!ATTLIST dcterms:hasPart
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:isVersionOf (#PCDATA)>
<!ATTLIST dcterms:isVersionOf
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:hasVersion (#PCDATA)>
<!ATTLIST dcterms:hasVersion
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:isFormatOf (#PCDATA)>
<!ATTLIST dcterms:isFormatOf
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:hasFormat (#PCDATA)>
<!ATTLIST dcterms:hasFormat
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:references (#PCDATA)>
<!ATTLIST dcterms:references
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:isReferencedBy (#PCDATA)>
<!ATTLIST dcterms:isReferencedBy
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:isRequiredBy (#PCDATA)>
<!ATTLIST dcterms:isRequiredBy
   scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:requires (#PCDATA)>
<!ATTLIST dcterms:requires
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:isReplacedBy (#PCDATA)>
<!ATTLIST dcterms:isReplacedBy
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT dcterms:replaces (#PCDATA)>
<!ATTLIST dcterms:replaces
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT ags:relationHasTranslation (#PCDATA)>
<!ATTLIST ags:relationHasTranslation
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!ELEMENT ags:relationIsTranslationOf (#PCDATA)>
<!ATTLIST ags:relationIsTranslationOf
  scheme (IPC | PN | ISBN | ISSN | JN | URI | ARN) #IMPLIED
<!-- ELEMENT availability -->
<!ELEMENT agls:availability (ags:availabilityLocation | ags:availabilityNumber)*>
<!ELEMENT ags:availablityLocation (#PCDATA)>
<!ELEMENT ags:availabilityNumber (#PCDATA)>
<!-- ELEMENT source -->
<!ELEMENT dc:source (#PCDATA)>
<!-- ELEMENT citation -->
```

Appendix B: Issues concerning AGRIS

B.1 Bibliographic levels

The bibliographic levels were introduced to allow the identification, within a single reference, all bibliographic entries of which the reference itself is composed and which are required to make the description of a documentary unit complete.

This therefore brings about the issues of relationships between a reference and another that would make it complete for ease of management and discovery. Three levels can be distinguished namely.

B.1.a Analytical level

Commonly referred to as *A level*, is used to classify documentary units that are not issued separately but as parts of a larger bibliographic entity. Analytical can therefore be part of, a monograph (AM), a series (AS) and a monographic series (AMS).

Note: The A level can never stand alone.

B.1.b Monographic level

Commonly referred to as M level, is used to classify documentary units that are complete at the time of issue or are to be issued in a predetermined number of parts for example (Nursing in Africa. Part. 1 and Nursing in Africa Part. 2) This are complete units but are related to each other by the fact that they are on they are dealing with the same topic.

Note: Possible combinations are M, AM, AMS.

B.1.c Serial level

Commonly referred to as S level, is used for publications issued in successive parts, usually having numerical or chronological designations and intended to be continued indefinitely. These include Serials, Periodicals, Newspapers, Journals and Monographic Serials.

Note: The S can never stand alone. Possible combinations are AS, AMS and MS.

B.2 The old system (Legacy data, AGRIN formats)

The previous AGRIS system is based on a flat file where by, metadata information of a resource that *is part of* another resource could not stand alone, and had the metadata information of the larger part included as part of the record. This was to enable a user to discover and locate the *analytic* resource through finding the larger whole. This therefore gave the current structure whereby a metadata record consists of information of the parent (larger whole).

B.3 The new system (AGRIS Application Profile)

With the advent of new technologies and new emerging standards, it is recommended that a metadata record consists of information of that is only pertinent to a particular resource but and any other information deemed important for discovery and access to the resource.

This therefore brings in the concept of linking of resources that are part of or have parts through a specific metadata record element, e.g. by the use of the Relation element of the DC Element Set. The DC element, Relation has been elaborated to give different forms of relationships that can possibly exist between two resources.

Examples: Is Part Of, Has Parts, Is Version Of, Has Version, Is referenced by, Reference, Is format Of, Has Formats, It Translation Of, Has Translation.

However, It is noted that the *Relation* element is not able to cater to the previous AGRIS system because the current proposed value for this element is limited to an *Identifier*, where as, there is

abundant metadata information of the larger whole part (M and S) which is considered necessary and should be retained. This therefore led to the introduction of the elements **Source** and **Citation**.

B.3.a Element: (DC) Source

The **Source** element will be a container element for metadata information of the "*Monographic level*" or the larger whole resource that is conceived necessary for discovery of an "*analytic*" resource (See 4.13).

B.3.b Element: (AGS) Citation

The *Citation* element is proposed to contain the information of the Serial (See 4.14).

B.4 Diacritics

Diacritical marks are the use of accent marks within certain languages. The old guidelines prohibited the use of diacritical marks because the system could not handle them. The AGRIS AP allows for use of diacritical marks because it will use the *Unicode Standard*. The advent of Unicode provides a way for all the necessary diacritic characters to be contained in a single font.

B.5 Transliterations

Transliteration is the conversion to the Roman alphabet of other alphabets such as Greek, Cyrillic, Arabic, Chinese etc. The AGRIS AP allows transliterations if available.

Appendix C: AGRIS Country and Centre Codes

C.1 Country Codes

			Carratura Carlas		
	44.54444	0.0	Country Codes		DEDUCA OF MOUROUS
AL	ALBANIA	GR	GREECE	MD	REPUBLIC OF MOLDOVA
DZ	ALGERIA	GD	GRENADA	OM	OMAN
AO	ANGOLA	GT	GUATEMALA	PK	PAKISTAN
AG	ANTIGUA AND BARBUDA	GN	GUINEA	PA	PANAMA
AR	ARGENTINA	GW	GUINEA-BISSAU	PG	PAPUA NEW GUINEA
AU	AUSTRALIA	GY	GUYANA	PY	PARAGUAY
AT	AUSTRIA	HT	HAITI	PH	PHILIPPINES
BS	BAHAMAS	HN	HONDURAS	PL	POLAND
BD	BANGLADESH	HK	HONG KONG	PT	PORTUGAL
BB	BARBADOS	HU	HUNGARY	QA	QATAR
BY	BELARUS	IS	ICELAND	RO	ROMANIA
BE	BELGIUM	IN	INDIA	RU	RUSSIAN FEDERATION
BZ	BELIZE	ID	INDONESIA	RW	RWANDA
BJ	BENIN	IR	IRAN ISLAMIC REPUBLIC	SA	SAUDIARABIA
ВО	BOLIVIA	IQ	IRAQ	SN	SENEGAL
BW	BOTSWANA	ΙE	IRELAND	SC	SEYCHELLES
BR	BRAZIL	IL	ISRAEL	SL	SIERRA LEONE
VG	BRITISH VIRGIN ISLANDS	IT	ITALY	SG	SINGAPORE
BG	BULGARIA	JM	JAMAICA	SK	SLOVAK REPUBLIC
BF	BURKINA FASO	JP	JAPAN	SI	SLOVENIA
BI	BURUNDI	JO	JORDAN	SB	SOLOMON ISLANDS
KH	CAMBODIA	KE	KENYA	SO	SOMALIA
CM	CAMEROON	KI	KIRIBATI	ZA	SOUTH AFRICA
CIVI	CAMEROON	NI NI	KOREA DEMOCRATIC	ZA	SOUTH AFRICA
CA	CANADA	KP	PEOPLE'S REPUBLIC	ES	SPAIN
CV	CAPE VERDE	KR	KOREA REPUBLIC	LK	SRI LANKA
CF	CENTRAL AFRICAN REPUBLIC	KW	KUWAIT	KN	ST CHRISTOPHER AND NEVIS
TD	CHAD	LV	LATVIA	LC	ST LUCIA
10	CIVE	LV	E/(TVI)/(ST VINCENT AND THE
CL	CHILE	LB	LEBANON	VC	GRENADINES
CN	CHINA	LS	LESOTHO	SD	SUDAN
СО	COLOMBIA	LR	LIBERIA	SR	SURINAME
CG	CONGO	LY	LIBYAN ARAB JAMAHIRIYA	SZ	SWAZILAND
CK	COOK ISLANDS	LT	LITHUANIA	SE	SWEDEN
CR	COSTA RICA	LU	LUXEMBOURG	СН	SWITZERLAND
CI	COTE D'IVOIRE	MG	MADAGASCAR	SY	SYRIA
HR	CROATIA	MW	MALAWI	TZ	TANZANIA
CU	CUBA	MY	MALAYSIA	TH	THAILAND
CY	CYPRUS	ML	MALI	TG	TOGO
CZ	CZECH REPUBLIC	MT	MALTA	TO	TONGA
DK	DENMARK	MU	MAURITIUS	TT	TRINIDAD AND TOBAGO
DJ	DJIBOUTI	MX	MEXICO	TN	TUNISIA
	DOMINICA	MN	MONGOLIA	TR	TURKEY
DM		MA		UG	
DO	DOMINICAN REPUBLIC		MOROCCO	-	UGANDA
EC	ECUADOR	MZ	MOZAMBIQUE	UA	UKRAINE
EG	EGYPT	MM	MYANMAR	GB	UNITED KINGDOM
SV	EL SALVADOR	NA	NAMIBIA	UY	URUGUAY
EE	ESTONIA	NP	NEPAL	US	USA
ET	ETHIOPIA	NL	NETHERLANDS	VE	VENEZUELA
FJ	FIJI	NZ	NEW ZEALAND	VN	VIETNAM
FI	FINLAND	NI	NICARAGUA	YE	YEMEN
FR	FRANCE	NE	NIGER	YU	YUGOSLAVIA
GA	GABON	NG	NIGERIA	ZR	ZAIRE
GM	GAMBIA	NO	NORWAY	ZM	ZAMBIA
DE	GERMANY	PE	PERU	ZW	ZIMBABWE
GH	GHANA	MK	REPUBLIC OF MACEDONIA		

C.2 Centre Codes

Centre Codes							
QB	ISNAR	QK	AOAD	QV	ICARDA		
QC	CIHEAM	QL	IIMI	QX	ICRISAT		
QD	IDRC	QM	ILRI	QY	CIMMYT		
QE	CARDI	QN	APIMONDIA	QZ	ICIMOD		
QF	ICIPE	QO	IUFRO	XB	AIBA		
QG	SPC	QP	CIP	XE	European Communities		
QH	ACSAD	QR	IRRI	XF	FAO		
QI	ICRAF	QT	CIAT	XL	CIDIA		
QJ	IPGRI	QU	IITA				

Appendix D: AGRIS to AGRIS AP mapping

The following table provides mapping guide from the AGRIS fields to the AP. It should be noted here that the recommendations in the table does not reflect some the Attribute constraints recommended in the AP because the current AGRIS system does not allow for all the possibilities. This, however, will be changed in the near future.

Bibl. Level	Inp. sheet No.	Field no.	AGRIN Field name	DTD element and qualifier	Attributes	Schemes
	1	1	TRN	Is described as part of metadata record information agrisResource	arn	
		2	RN (not applicable on input)	n.a.		
	3	3	Record status	n.a.		
	4	4	Affected RN	n.a.		
	5	5	Relator	n.a.		
	6	6	Related RN (TRN)	dc:relation/dcterms:IsVersionOf dc:relation/dcterms:HasVersion dc:relation/dcterms:IsReplacedBy dc:relation/dcterms:Replaces dc:relation/dcterms:IsRequiredBy c:relation/dcterms:IsRequires dc:relation/dcterms:IsPartOf dc:relation/dcterms:IsPartOf dc:relation/dcterms:IsReferencedBy dc:relation/dcterms:IsReferencedBy dc:relation/dcterms:IsFormatOf dc:relation/dcterms:HasFormat dc:relation/dcterms:HasFormat dc:relation/ags:IsTranslationOf dc:relation/ags:HasTranslation		URI or ARN (The Temporary Record Number has been renamed to AGRIS Resource Number)
	7	7	Primary subject category	dc:subject/ags:subjectClassification		ASC CABC
	7	8	Secondary subject category (first)	dc:subject/ags:subjectClassification		DDC LCC
	7	9	Secondary subject category (second)	dc:subject/ags:subjectClassification		UDC
	8	10	Type of publication	n.a.		
	8	11	Bibliographic levels	Is described as part of metadata record information		
	8	12	Literary indicators	dc:type		AGRIS Contr. list
		13	Extension material (not used for AGRIS)	n.a.		
А	100	100	Personal author(s) (Affil.)	ags:creator/ags:creatorPersonal	xml:lang (O)	
Α	110	110	Corporate author(s)	ags:creator/ags:creatorCorporate	xml:lang (O)	
А	111	111	Academic degree	dc:description/ags:descriptionNotes	xml:lang (O)	
Α	200	120	English title	dc:title	xml:lang (M)	

А	202	122	French title	dc:title	xml:lang (M)	
Α	204	124	Spanish title	dc:title	xml:lang (M)	
Α	206	126	Other title(non- English, French or Spanish)	dc:title/dcterms:alternative	xml:lang (O)	
Α	210	130	Conference name	ags:creator/ags:creatorConference	xml:lang	
Α	211	131	Conference place	ags.creator/ags.creatorcomerence	(O)	
Α	213	133	Conference date			
Α	300	150	Report/Patent number	dc:identifier		RN - PN
Α	310	151	Secondary numbers	dc:identifier		IPC ISBN ISSN JN PN RN URI
Α	320	152	ISBN/IPC	dc:identifier		ISBN - IPC
Α	500	170	Collation	dc:format/dcterms:extent		
А	600	180	Language of text	dc:language		ISO639-1 ISO639-2 noscheme
Α	601	181	Summary statement	dc:description/ags:descriptionNotes	xml:lang (O)	
Α	610	182	Notes	dc:description/ags:descriptionNotes	xml:lang (O)	
М	100	200	Personal author(s) (Affil.)	ags:creator/ags:creatorPersonal	xml:lang (O)	
М	110	210	Corporate author(s)	ags:creator/ags:creatorCorporate	xml:lang (O)	
М	111	211	Academic degree	dc:description/ags:descriptionNotes	xml:lang (O)	
М	200	220	English title	dc:title	xml:lang (M)	
М	202	222	French title	dc:title	xml:lang (M)	
М	204	224	Spanish title	dc:title	xml:lang (M)	
M	206	226	Other title (non- English, French or Spanish)	dc:title/dcterms:alternative	xml:lang (O)	
М	210	230	Conference name			
М	211	231	Conference place	ags:creator/ags:creatorConference	xml:lang (O)	
М	213	233	Conference date			

М	250	240	Edition	dc:description/ ags:descriptionEdition		
М	300	250	Report/Patent number	dc:identifier		RN - PN
M	310	251	Secondary number(s)	dc:identifier		IPC ISBN ISSN JN PN RN URI
М	320	252	ISBN/IPC	dc:identifier		ISBN IPC
М	401	261	Imprint: Place of publication	dc:publisher/ags:publisherPlace		
М	402	262	Imprint: Publisher	dc:publisher/ags:publisherName		
М	403	263	Imprint: Date of publication	dc:publisher/dcterms:issued		
М	500	270	Collation	dc:format/dcterms:extent		
M	600	280	Language of text	dc:language		ISO639-1 ISO639-2 noscheme
М	601	281	Summary statement	dc:description/ags:descriptionNotes	xml:lang (O)	
М	610	282	Notes	dc:description/ags:descriptionNotes	xml:lang (O)	
М	611	283	Availability	agls:availability/ags:availabilityLocation agls:availability/ags:availabilityNumber		
S	230	420	Serial main title	ags:citation/ags:citationTitle	xml:lang	
S	231	421	Serial title: sec. elements	ags:citation/ags:citationTitle		
S	320	450	ISSN	ags:citationIdentifier		ISSN
S	403	463	Date of Publication	dc:publisher/dcterms:issued		
S	500	470	Collation	dc:format/dcterms:extent		
S	610	482	Notes	dc:description/ags:descriptionNotes	xml:lang (O)	
S	611	483	Availability	agls:availability/ags:availabilityLocation agls:availability/ags:availabilityNumber	xml:lang	
Х	9		Language code of AGROVOC descriptors	n.a.		
X/EN	800	501	English AGROVOC descriptors	dc:subject/ ags:subjectThesaurus	xml:lang (M)	AGROVOC CABT ASFAT NALT MeSH LCSH
X/EN	810	502	English Comments/Proposed terms	dc:subject	xml:lang (M)	
X/EN	830	503	English upposted AGROVOC descriptors	n.a.		

X/FR	800	521	French AGROVOC descriptors	dc:subject/ags:subjectThesaurus	xml:lang (M)	AGROVOC CABT ASFAT NALT MeSH LCSH
X/FR	810	522	French Comments/Proposed terms	dc:subject	xml:lang (M)	
X/FR	830	523	French upposted AGROVOC descriptors	n.a.		
X/ES	800	541	Spanish AGROVOC descriptors	dc:subject/ ags:subjectThesaurus	xml:lang (M)	AGROVOC CABT ASFAT NALT MeSH LCSH
X/ES	810	542	Spanish Comments/Proposed terms	dc:subject	xml:lang (M)	
X/ES	830	543	Spanish upposted AGROVOC descriptor	n.a.		
Х	-840	591	AGROVOC descriptor codes	n.a.		
х	-840	592	Reserved for AGROVOC descriptor codes	n.a.		
X	9	6xx	Reserved for local AGROVOC translations	n.a.		
Х	9	700	Language code of local terms	n.a.		
Х	820	701	Local terms (non- AGROVOC)	dc:subject	xml:lang	
Х	9	710	Language code of first abstract	n.a.		
Х	860	714	First abstract	dc:description/dcterms:abstract	xml:lang (M)	
Х	9	720	Language code of second abstract	n.a.		
Х	860	724	Second abstract	dc:description/dcterms:abstract	xml:lang (M)	

Appendix E: Examples

E.1 A Website

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE agrisResources SYSTEM "Agris.dtd">
<agrisResources>
   <agrisResource arn="XF2003000001">
      <dc:title xml:lang="eng">The Agricultural Metadata Element Set Project (AgMES) 
      <dc:title xml:lang="eng">
         <dcterms:alternative xml:lang="eng">AgMES</dcterms:alternative>
         <dcterms:alternative xml:lang="eng">Project AgMES</dcterms:alternative>
      </dc:title>
      <aqs:creator>
         <ags:creatorCorporate>FAO, Rome (Italy). Library and Documentation Systems Div.
</ags:creatorCorporate>
      </ags:creator>
      <dc:publisher>
         <ags:publisherName>FAO</ags:publisherName>
         <dcterms:issued>2002</dcterms:issued>
      </dc:publisher>
      <dc:subject>
         <aqs:subjectClassification>C30</aqs:subjectClassification>
         <ags:subjectThesaurus scheme="ags:AGROVOC">AGRIS</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">LIBRARIANSHIP</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">STANDARDS</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">METHODS</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">TRAINING</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">AGRIS (Information retrieval system)
</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Information organization-
Standards.</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Descriptive cataloguing-Handbooks, manuals, etc.
</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Agriculture-Bibliography</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Z699.35.M28</ags:subjectThesaurus>
      </dc:subject>
      <dc:description>
         <ags:descriptionNotes>Includes separate documents, conferences, tools, and a glossary
</ags:descriptionNotes>
         <dcterms:abstract xml:lang="eng">
The project AgMES defines elements, qualifiers, encoding schemes and controlled lists that are generic yet
deemed necessary for the description of agricultural resources.
         </dcterms:abstract>
      </dc:description>
      <a href="cdc:identifier scheme="URI">http://www.fao.org/agris/agmes/ </dc:identifier>
      <dc:type>Text</dc:type>
      <dc:format>
         <dcterms:extent>1 Website</dcterms:extent>
      </dc:format>
      <dc:language scheme="ISO639-2">eng</dc:language>
      <aqls:availability>
         <ags:availablityLocation>Food and Agriculture Organization of the UN. Viale delle Terme di
Caracalla, 00100 Rome, Italy</ags:availablityLocation>
         <ags:availabilityNumber>99999</ags:availabilityNumber>
      </agls:availability>
   </agrisResource>
</agrisResources>
```

E.2 A document from the above website

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE agrisResources SYSTEM "Agris.dtd">
<agrisResources>
   <agrisResource arn="XF2003000002">
      <dc:title xml:lang="eng">A Dublin Core Application Profile in the Agricultural Domain </dc:title>
         <ags:creatorPersonal>Onyancha, I.</ags:creatorPersonal>
         <ags:creatorPersonal>Keizer, J.</ags:creatorPersonal>
         <aqs:creatorPersonal>Katz, S.</aqs:creatorPersonal>
         <ags:creatorCorporate>FAO, Rome (Italy). Library and Documentation Systems Div.
</ags:creatorCorporate>
         <ags:creatorConference>International Conference on Dublin Core and Metadata Applications,
Tokyo (Japan), 22-26 Oct 2001 </ags:creatorConference>
      </ags:creator>
      <dc:publisher>
         <ags:publisherName>FAO</ags:publisherName>
         <ags:publisherPlace>Rome (Italy) </ags:publisherPlace>
         <dcterms:issued>2001</dcterms:issued>
      </dc:publisher>
      <dc:subject>
         <ags:subjectClassification>C30</ags:subjectClassification>
         <ags:subjectThesaurus scheme="ags:AGROVOC">LIBRARIANSHIP</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">STANDARDS</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">METHODS</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Dublin Core</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Agricultural information
networks</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Metadata</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="dc:LCSH">Agriculture-Bibliography</ags:subjectThesaurus>
      </dc:subject>
      <dc:description>
         <dcterms:abstract xml:lang="eng">This report outlines a proposed metadata framework for
resource discovery of agricultural resources, and in particular to describe information resources in
agricultural sciences. The overall work is the result of a collaborative effort between a number of partners in
the agricultural community and the Library and Documentation Systems Division of FAO. The endeavour is
formally referred to as the "Agricultural Metadata Standards Initiative" (Agstandards). It is based upon the
elements and qualifiers proposed by the Dublin Core Metadata Initiative (DCMI).
</dcterms:abstract>
         <ags:descriptionNotes xml:lang="eng">Summary (En) </ags:descriptionNotes>
      </dc:description>
      <a href="cdc:identifier scheme="URI">http://www.fao.org/agris/agmes/Conference Papers/DC-
2001/DC2001 FAO1.htm </dc:identifier>
      <dc:type>Text</dc:type>
      <dc:format>
         <dcterms:extent>1 Webpage</dcterms:extent>
      </dc:format>
      <dc:language scheme="ISO639-2">eng</dc:language>
      <dc:relation>
         <dcterms:isPartOf scheme="ARN">XF2003000001
         <dcterms:hasFormat scheme="URI">http://www.fao.org/agris/agmes/Conference Papers/DC-
2001/DC2001-FAO1.doc </dcterms:hasFormat>
         <dcterms:hasFormat scheme="URI">http://www.fao.org/agris/agmes/Conference Papers/DC-
2001/Dc-2001x.ppt </dcterms:hasFormat>
      </dc:relation>
      <agls:availability>
         <ags:availablityLocation>Food and Agriculture Organization of the UN. Viale delle Terme di
Caracalla, 00100 Rome, Italy</ags:availablityLocation>
         <ags:availabilityNumber>99998</ags:availabilityNumber>
```

</agls:availability>
</agrisResource>
</agrisResources>

E.3 Book

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE agrisResources SYSTEM "Agris.dtd">
<agrisResources>
   <agrisResource arn="XF1997000682">
      <dc:title xml:lang="eng">The economic context for grassland farming </dc:title>
      <aqs:creator>
         <ags:creatorPersonal>McInerney, J.P. </ags:creatorPersonal>
      </ags:creator>
      <dc:publisher>
         <dcterms:issued>1995</dcterms:issued>
      </dc:publisher>
      <dc:subject>
         <ags:subjectClassification>E20</ags:subjectClassification>
         <ags:subjectClassification>E11</ags:subjectClassification>
         <ags:subjectClassification>P01</ags:subjectClassification>
         <ags:subjectThesaurus scheme="ags:AGROVOC">FARMS</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">livestock</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">grasslands</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">land use</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">efficiency</ags:subjectThesaurus>
         <ags:subjectThesaurus scheme="ags:AGROVOC">united kingdom </ags:subjectThesaurus>
      </dc:subject>
      <dc:description>
         <ags:descriptionNotes xml:lang="eng">7 ref., BGS Occasional Symposium No. 29
</ags:descriptionNotes>
         <ags:descriptionNotes xml:lang="eng"> BGS Occasional Symposium No.
29.</ags:descriptionNotes>
         <ags:descriptionNotes xml:lang="eng"> BGS Occasional Symposium No.
29.</ags:descriptionNotes>
      </dc:description>
      <dc:identifier scheme="ISBN">0-905944-34-8</dc:identifier>
      <dc:format>
         <dcterms:extent>p. 96-112.</dcterms:extent>
      </dc:format>
      <dc:language scheme="ISO639-2">eng</dc:language>
      <dc:source>Grassland into the 21st century: challenges and opportunities. Proceedings of the 50th
Anniversary Meeting of the British Grassland Society, Harrogate, UK, 4-6 December, 1995. Pollott, G.E.
(ed.). Reading (United Kingdom). British Grassland Society (BGS). </dc:source>
   </agrisResource>
</agrisResources>
```