**CATALOGING ELECTRONIC RESOURCES/ELECTRONIC RESOURCES DISPLAY IN THE OPAC TASK FORCE**

**FINAL REPORT**


**February 11, 2004**

**Minor corrections made March 17, 2004**


**Approved by the ILCSO Users' Advisory Group, February 13, 2004**

**Approved by the ILCSO Board of Directors, April 12, 2004**

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# Executive Summary

The ILCSO Users' Advisory Group established its Cataloging Electronic Resources/Electronic Resources Display in the OPAC Task Force in 2003. The IUAG's assignments to the Task Force were to:

> Re-examine the issue of single versus multiple bibliographic records for titles found in different physical formats (e.g., a title available in print and electronically);

> Resolve issues involving the 856 field (e.g., should this field exist in the bibliographic record, the holdings record or both);

> Identify best practices for cataloging electronic resources in a consortium environment;

> Investigate options for clear and effective display of electronic resources in the OPAC.

In submitting this report, the Task Force believes that it has fulfilled its charge. Additionally, the Task Force has identified related issues outside of its charge and is forwarding these recommendations to the appropriate ILCSO committees and task forces.

There are three degrees of recommendation in this document.

> "Strongly recommends" – The Task Force hopes its recommendation will be followed without exception.

> "Recommends" – The Task Force's recommendation should be followed if at all possible.

> "Optionally" – The Task Force leaves a final decision up to the individual library.

For easier correlation between the summarized lists of recommendations and the more fully explicated recommendations in this document, each recommendation is printed in **bold** and is consistently numbered **R#**, wherever it appears in the document. The recommendations of this Task Force follow.

The Task Force is aware of the potentially significant impact of emerging technology on the cataloging and display of electronic resources. As emerging technology is investigated by other groups within ILCSO, there is reason to believe that some recommendations made by this Task Force could require re-evaluation at a future date.

## Single versus Multiple Records Recommendations

### *R1*

**The Task Force recommends creating separate bibliographic records for monographs or monographic sets issued in electronic form (e.g., one for the print version, one for the electronic version)**. The Task Force recognizes, however, that an institution may have reasons to use a single bibliographic record for multiple formats of the same monographic title, especially if records are imported from vendors like Marcive, and acknowledges that it may be difficult for some institutions to follow this recommendation.

### *R2*

The Task Force has decided it cannot make a recommendation about whether multiple serial formats should be represented in a unified or in separate bibliographic records. **The Task Force leaves each ILCSO library the option to use a single record for all physical manifestations of a serial title or to use separate records for each manifestation.**

*R3*

**If the single bibliographic record approach is used, the Task Force strongly recommends that the library create a separate MFHD for each physical format of a title.**

*R4*

**If the separate record approach is used for serials, the Task Force recommends using the aggregator-neutral record concept** (see Glossary) **developed and implemented by CONSER for electronic serials available from one or more providers.**

*R5*

**The Task Force recommends that each MFHD representing an electronic resource be assigned a location specifically designated for electronic resources rather than for any other physical format. The Task Force recommends that each library make its own decisions about how many such locations to create and what names to give them.**

*R6*

**The Task Force strongly recommends that when separate bibliographic records are used for the print and electronic versions:**

> **each bibliographic record should contain a 530 and 776 field;**
>
> **the bibliographic record for the electronic version should contain a 007 field; and**
>
> **the MFHD for the electronic version should contain a 007 and an 856 field. (See also R9.)**

*R7*

**The Task Force strongly recommends that when a single bibliographic record is used for both versions:**

> **the bibliographic record should contain a 007 and a 530 field but not necessarily a 776 field;**
>
> **a separate MFHD for each physical format should be created; and**
>
> **the MFHD for the electronic version should contain a 007 and an 856 field. (See also R9.)**

*R8*

**Optionally, a library may choose to include a 530 note in a record even if it does not hold the alternative version, since its patrons may have access to another library that holds that version.**

## The 856 Field Recommendations

The Task Force recognizes that each ILCSO library can, within the ILCSO WebVoyage Customization Guidelines, make local decisions for its own OPAC and that these decisions might vary from the consortial decisions made for the display of information in the Universal Catalog (UC). In coming to its conclusions, the Task Force was extremely conscious of how its decisions might affect both local catalogs and the UC.

### R9

**The Task Force strongly recommends that libraries place in the 856 field of the MFHD record the URL appropriate to their local users.** The URL appropriate to local users may or may not be "shareable."

### R10

**The Task Force strongly recommends that libraries retain any extant shareable URLs** (see Glossary) **in the bibliographic record. Libraries may opt to retain these URLs in the 856 field of the bibliographic record or in a 596 field. Libraries would use the 596 to retain a URL if they display the 856 field from the bibliographic record in their local catalog and if the URL that is already in the record appears to be shareable but is not appropriate for local users.**

### R11

**The Task Force strongly recommends that all URLs be verified at the time they are added to the catalog.**

### R12

**The Task Force recommends that subfield u of the 856 field in bibliographic records in the Universal Catalog display as text only, not as a hyperlink, beginning immediately, and strongly recommends that the 856 field of the bibliographic record be suppressed altogether from display in the Universal Catalog after a suitable transition period. (The 856 fields from local MFHDs would continue to display as hyperlinks in the Universal Catalog.)**

### R13

**The Task Force recommends that local libraries continue to decide whether or not to display bibliographic record 856 fields, as allowed by current OPAC Customization Task Force Recommendations.**

### R14

**The Task Force strongly recommends that URLs in MFHD 856 fields be kept current.**

### R15

**If a library chooses (R13) to configure any of its OPAC Views to display data from 856 fields of bibliographic records, then the Task Force strongly recommends that the library keep the 856 fields of its bibliographic records current as well as those of its MFHD records.**

### R16

**The Task Force strongly recommends that when a library adds an 856 field containing a non-shareable URL** (see Glossary) **to a bibliographic record, any shareable URL in an existing 856 field be transferred to a 596 field. This recommendation applies whether or not the library currently displays the 856 field in the bibliographic record.**

*R17*

**The Task Force recommends that, if catalogers add a non-shareable URL to a bibliographic record, they add a note in the 856 subfield x or z identifying that URL with their institution.**

*R18*

**The Task Force recommends that, if catalogers add a shareable URL to a bibliographic record, or encounter one already included in the record, and if they know that access to the resource is restricted (to users affiliated with a particular institution, for instance), they add a statement of restriction in a public note field (856 subfield z or 852 subfield z).**

*R19*

**The Task Force recommends that libraries use neither the 856 field nor any other field for archiving obsolete URLs in the library catalog.**

*R20*

**If there are multiple active URLs for a serial title, all of which lead to some part of a library's online holdings, the Task Force strongly recommends that catalogers create a separate MFHD for each applicable URL in cases where a single MFHD would result in a confusing OPAC display.**

*R21*

**If there are multiple active URLs for a monographic title, all of which lead to some part of a library's online holdings, the Task Force recommends that catalogers create a separate MFHD for each applicable URL.**

*R22*

**If a library has compelling reasons to use a single MFHD for a monographic title (that is, if a library cannot follow recommendation R21), or if a library is convinced that a single MFHD for multiple, active URLs for a serial title would not result in a confusing OPAC display (see R20), then the Task Force strongly recommends that catalogers create separate 856 fields for each applicable URL in the MFHD.**

*R23*

**The Task Force strongly recommends that, unlike the recommendation for DRA, 856 data not be included in the 866 field of the MFHD.**

## Related Recommendations

*R24*

**The Task Force recommends that an appropriate IUAG task force investigate software that can review and validate URLs in the library catalog.**

*R25*

**The Task Force recommends that IUAG facilitate one or more peer-to-peer training sessions on the application of these recommendations, by and for practicing ILCSO catalogers.** The cataloger-trainers (or session leaders) would be responsible for distilling training

materials from this Task Force report, and for stressing adherence to current national cataloging standards as well as Task Force recommendations.

*R26*

**The Task Force recommends that the cataloger-trainers of the peer-to-peer training sessions (see R25) be responsible for distilling training materials from this Task Force report.**

*R27*

**The Task Force recommends that ILCSO explore the possibility of developing a program that would automate portions of the labor-intensive task of transferring data retrospectively from 856 fields in a bibliographic record to 856 fields in the appropriate MFHD.**

*R28*

**The Task Force recommends that the IUAG continually assess options for improving Voyager's duplicate detection scheme to prevent the inappropriate overlay of bibliographic records in the Universal Catalog.**

*R29*

**The Task Force recommends that libraries not create item records for electronic resources. (The single exception to this recommendation is the e-item record used in Voyager reserves.)**

*R30*

**The Task Force endorses the work of the IUAG Consortial Cataloging and Authority Control Committee (CCAC) on the "Cooperative Cataloging Guidelines" and strongly recommends that ILCSO libraries adhere to the Guidelines, particularly with regard to appropriate use of non-OCLC records from the Universal Catalog.**

*R31*

**The Task Force recommends that the IUAG commission a further report, from either CCAC or a new task force, to examine the implications of using records obtained from vendors other than OCLC, and to propose guidelines for the acceptance, use and maintenance of these records.**

*R32*

**The Task Force strongly recommends adding 776 $x to the consortial keyword ISSN search definition.**

## Committee Members

Conrad Winke, Chair (Columbia College)

Susan Braxton (Illinois State University)

Kevin Butterfield (University of Illinois at Urbana-Champaign — Resigned)

Xiaotian Chen (Bradley University)

Chiat Naun Chew (University of Illinois at Urbana-Champaign)

Larry Colgan (DePaul University)

Elizabeth Lowe (Southern Illinois University Edwardsville)

Marcia Thomas (Illinois Wesleyan University)

Courtney Greene, IUAG Liaison (University of Illinois at Chicago / DePaul University)

Marjorie Bloss, ILCSO staff liaison through August 2003 (ILCSO Office)

Jessica Gibson, ILCSO staff liaison from September 2003 (ILCSO Office)

Paige Weston, back-up ILCSO staff liaison (ILCSO Office)

# Background

This is the second iteration of the Cataloging Electronics Resources Task Force (CatER). The first Task Force met in 2000/2001 for the purpose of discussing the representation of these materials in the DRA environment. The first Task Force dealt with the following issues:

Whether a single record should be used to represent many physical formats of a title (e.g., paper copy, microfilm, microfiche, electronic versions) or if each manifestation of a title should have a separate bibliographic record;

Where the 856 field (containing a hot-linked URL to the electronic version of a work) should be found: in the bibliographic record, in the MFHD, or both

DRA-specific concerns.

With regard to the number of records to use, in addition to assessing cataloging rules and national conventions the first Task Force polled ILCSO libraries. The responses showed that ILCSO libraries were fairly evenly divided between using single and multiple records for a title. The first CatER Task Force decided not to make a recommendation on which method to apply, feeling that "each library needs to choose the best method based on its patrons' needs and consideration of acquisitions and interlibrary loan requirements."[1]

With regard to where the 856 field should be recorded (bibliographic record or MFHD or both), the first CatER Task Force considered the options for retrieval and access, display, cataloging, maintenance, and migration. Their recommendations were presented at a Technical Services Forum in May 2000. The Task Force recommended that the URL be maintained in three places: the 856 field in the bibliographic record, the 856 field in the MFHD, and the 866 field in the MFHD. Because of the way DRA was programmed, only the URL in the bibliographic record would be hot-linked to the electronic version of the publication.

With the migration to Voyager, the IUAG felt that these issues should be re-examined. The CatER was re-established in early 2003 with a narrower focus and comprised of the members listed above. With the exception of its first meeting, the IUAG Cataloging Electronic Resources/Electronic Resources Display in the OPAC Task Force met through conference calls on a monthly basis.

# Charge to the IUAG CatER Task Force

The IUAG specified that the new CatER Task Force should include representation from Cataloging, Acquisitions/Serials, and OPAC/Public Services. In addition someone should be sought with knowledge about the opportunities and requirements presented by electronic journal

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[1] IUAG Cataloging Electronic Resources Task Force. Minutes of the meeting of February 8, 2000

management services such as SerialsSolutions, Journal/WebCite, or TDNet. IUAG assigned these tasks to the Cataloging Electronic Resources/Electronic Resource Display in the OPAC:

> Document present standards for the cataloging of electronic resources.

> Identify best practices for cataloging of electronic resources in ILCSO's consortial environment.

> Investigate options for clear and effective display of electronic resources in the OPAC.

## Goals, Actions, Timeline

The new CatER Task Force convened for its first meeting on March 13, 2003. After considering the charge it had been given by the IUAG, the Task Force narrowed its focus to remote access electronic resources (see Glossary) and set itself the following goals and actions.

> Charge: Document present standards for the cataloging of electronic resources.

> - o Goal: Revise recommendations document prepared in May 2000 by previous incarnation of this Task Force.

> > - ▪ Action: The Task Force planned to collect information on practices for cataloging electronic resources from other consortia/institutions; to examine existing cataloging standards put forward by recognized bodies (AACR2R, ISBD(CR), OCLC, CONSER, ILCSO, etc.); and to develop working definitions for the various categories of electronic resources.

> Charge: Identify best practices for cataloging electronic resources in ILCSO's consortial environment.

> - o Goal: Create a best practices document that addresses the key issues.

> > - ▪ Action: The Task Force planned to consider how URL maintenance is accomplished at other consortia/institutions; to examine these issues in the ILCSO environment and to make appropriate recommendations.

> > - ▪ Action: The Task Force planned to investigate appropriate record use for titles included by aggregators. Special emphasis would be placed on models for a consortial environment. National standards such as those proposed by CONSER were to be reviewed and evaluated.

> > - ▪ Action: The Task Force planned to study the issue of single versus multiple records for electronic resources; to review the policies of other consortia and libraries related to this issue; to examine the national cataloging standards with regard to the single versus multiple record approach; and to document guidelines that facilitate a best practice approach to this issue.

> Charge: Investigate options for clear and effective display of electronic resources in the OPAC.

> - o Goal: Fully examine display issues with regard to any of the Task Force's recommendations, including but not limited to use of bibliographic records, MFHDs, and 856 fields in the ILCSO environment. Take note of any new trends in software technology that might affect display issues, such as OpenURL.

> > - ▪ Action: The Task Force planned to discuss cataloging policies and record use with careful regard to the resulting critical display issues that impact patrons in both their local catalogs and in the Universal Catalog.

- Action: By conducting a national survey, the Task Force planned to inquire about new trends, including: experiences with implementation of new digital products; the impact of new technologies like OpenURL, and any other new developments in workflow or policy approach that might affect the cataloging and display of electronic resources.

  Action: The Task Force offered to work with the Digital Library Products Committee and the OPAC Customization Task Force, as appropriate, the better to coordinate the CatER Task Force's recommendations and to insure a broadly balanced approach to these issues.

*Original Timeline:*

Late May 2003:

- o Research on other consortia and standards completed; meet to begin revision of document

Late summer/early fall 2003

- o Revised document completed and ready for review/distribution

Spring 2004

- o Best practices information collected and ready for distribution

Courtney Greene, Task Force liaison, submitted proposed actions and timeline to the IUAG at its March 2003 meeting. The Task Force moved quickly with all identified tasks by dividing into small sub-groups. The Task Force believed that it would be clearer to combine the second and third parts of the timeline. In submitting this report, the Task Force believes that it has fulfilled its charge ahead of schedule. Additionally, the Task Force has identified related issues outside of its charge and urges that these recommendations be forwarded to the appropriate ILCSO committees and Task Forces.

## Review of Standards Dealing with Cataloging Electronic Resources

One of the actions undertaken by the CatER Task Force was to review existing standards or quasi-standards dealing with the cataloging of electronic resources. A small sub-group of the Task Force worked on this activity. The result was a chart that lists the various cataloging codes, standards, and national practices, and the treatment recommended for electronic resources in each. See Appendix 1.[2] An historical overview of the "multiple version" issue and a description of some of the current practices are listed below.

For many years, the library community has grappled with the problem of how to represent multiple physical manifestations (e.g., print or paper version, microfilm and microfiche) of a single title in a catalog or file. The creation of electronic resources has only compounded the problem.

The first edition of *Anglo-American Cataloguing Rules*, 2nd edition (*AACR2*) was very clear, stating that a separate bibliographic record should be created for each physical manifestation of a title (one bibliographic record for the print version, one for the microfilm version, one for the microfiche version, etc.). While this rule was easily followed for monographs, serials presented problems due to their ongoing nature and the fact that several different distributors might issue

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[2]Appendix 1: Multiple Versions: Single or Multiple Bibs as Recommended by National and International Standards (Marjorie Bloss, Chew Chiat Naun, Marcia Thomas, members of the IUAG Cataloging Electronic Resources Task Force)

the same title. As a result, a number of libraries decided to use a single bibliographic record to describe the title (most often the bibliographic record for the print version, with a 533 field used to describe other physical versions of the same title) and to use the holdings record to reflect the physical format(s) of their holdings. Public services staff in particular found the single bibliographic record approach far preferable to having many records for the same title.

Treatment of "multiple versions," as this quandary has been called, has been relaxed considerably since *AACR2* was published in 1980. The 2002 revision of AACR2 does not explicitly prescribe single or multiple record treatment for electronic versions, nor does the new Chapter 9 on electronic resources or Chapter 12 on continuing resources. Both the ISBD(CR)—the new edition of ISBD(S)—and the CONSER Cataloging Manual have also backed off from prescribing separate bibliographic records for multiple versions of a title, recognizing the importance of local practices and needs. While these works provide guidance, we can no longer say they mandate one method of bibliographic description over another as they once did.

Recently, CONSER has recommended how to catalog electronic journals supplied by more than one aggregator or provider. Originally called Option B+, this option is now, more descriptively, called the "Aggregator-neutral record." Basically it is a single record that covers all electronic versions of a given e-journal but that is separate from the record for the print version. CONSER has decided to catalog the title based on who issues it rather than who distributes it, thus making it unnecessary to update the record even if the aggregator changes.

In that cataloging standards have moved away from insisting that separate records be created for each physical manifestation of a title, the current **CatER Task Force leaves each ILCSO library the option (R2) to use a single record representing all versions of a serial title or multiple records where each physical manifestation of a title has its own bibliographic record.** Libraries' decisions should be based on the current cataloging practices summarized in Appendix!1 and the analysis of the issues in the single-versus-separate record debate summarized in Appendix!2. When cataloging e-resources received from aggregators and using the separate record approach, **the Task Force recommends (R4) that libraries use the aggregator-neutral record concept developed and implemented by CONSER for electronic serials available from one or more providers.**

## Analysis of Best Practices

The majority of Task Force members worked on gathering information on what is considered best practice in other library environments for cataloging, displaying, and providing access to e-resources. The method was to divide the United States into regions with each person taking a specific geographic region to survey. Larry Colgan (DePaul) devised a list of questions to ask so that survey results could be consistent.

(It should be noted that, during the process of data collection for this part of the Task Force's charge, Jim Cole, editor of *Serials Librarian* heard that this survey was underway and asked Courtney Greene (UIC) about the possibility of it becoming an article for *SL*. The article is forthcoming.)

Summaries of common and of unique or interesting practices follow:

### Part I. Summary of Common Practices

Single bibliographic record used or preferred by the majority of respondents.

National standards, such as OCLC's, CONSER, etc., followed.

Most institutions offer access to e-resources through their OPAC and also through a Web-based listing of some type. Title lists from full-text databases either provided by vendors like SerialsSolutions or homegrown: some simply listing, some SQL compatible.

Most do not catalog titles from full-text indexes in which content changes frequently, such as LexisNexis.

Most do not purchase MARC records from a 3rd party such as SerialsSolutions, though a few get MARC records directly from resource providers such as netLibrary.

## Part II. Summary of Unique, Interesting or Exciting Practices

856 and bibliographic record. Though most libraries and consortia have URLs in their bibliographic records and are happy with this, a few do or think differently:

- o University of Minnesota: if licensed resource, URLs are placed in MFHD only; but if freely available, URLs are placed in the bibliographic record as well.

- o Georgia's consortium GALILEO's recent recommendation: URL is placed in the bibliographic record if accessible to all users. If it is only accessible to a single library's patrons, the URL should be placed in the MFHD with some kind of "dummy URL" in the bibliographic record.

- o University of Washington catalogers opined that the 856 field doesn't belong in the bibliographic record because it is considered a holding. However, New York University has also addressed this issue, and seems to be leaning towards the opposite conclusion.

- o University of Wisconsin-Whitewater has suppressed URLs from the bibliographic record.

Access e-resources via OPAC versus via Web lists.

- o SUNY-Albany does not have Web lists for subscription-based resources. Instead, 100% are cataloged including titles from full-text indexes in which content changes frequently, such as LexisNexis.

- o Drexel University, which is well known for canceling most of its print journals and having them only online, does not catalog any e-journals. Instead, they have a homegrown database/list for journals of all formats.

The role of union catalog

- o According to Drexel University, Access PA, the state union catalog, does not include cataloged e-resources that are accessible only to selected members. In other words, the union catalog only has cataloged URLs that will work statewide.

- o The union catalog of Boston Library Consortium (Brown University, Boston University, Northeastern University, University of Massachusetts, Tufts University, Wellesley College, Williams College, etc.) does not include journals/serials.

Tracking URLs/dead links (Reporting dead links)

- o Check dead links at consortial level: MOBIUS (Missouri), LOUIS (Louisiana Library Network), and Western North Carolina Library Network.

- o At institutional level: About half do not check dead links. For those that do, some rely on manual check, some do not run the check on regular basis, some

reported problems with software checkers, and some do it with software on regular basis without problems.

Different policies for e-monograph and e-serial resources. One library in the northwest believes that there should be different policies for e-monograph and e-serial resources.

Careful selection of URLs: University of Alaska Anchorage – Consortium: There are very strict guidelines at the time of cataloging for inclusion of the 856 field in the bibliographic record. Catalogers first check the 856 field, then remove any dead links, links that lead to a publisher's Web site, or links that contain a table of contents that already exists in the 505 field. They also remove 856 fields that lead to advertisements, the author's home page or sites that are "under construction."

OpenURL link revolver software such as SFX (by Ex Libris) and LinkFinder*Plus* (by Endeavor) is used or is under consideration by quite a few libraries across the country.

Related to OpenURL linking, other developments are: a common gateway to both electronic and print serials, OpenURL-enriched MARC records for e-journals, purchased from vendors such as SerialsSolutions and Ex Libris.

Off-campus access via OPAC.

- o Consortium-wide. FCLA (Florida Center for Library Automation): A note directs patron to "restricted access resource" page, from which patrons authenticate with their logon ID and password.

- o Similarly, some individual campuses add local proxy server information to the URLs in the catalog records for their electronic resources.

## Analysis of the 856 Field

The Task Force looked at a number of issues concerning the 856 field. These included:

a) What a library's responsibility is for verifying that a URL is current;

b) Whether the 856 field should be displayed and/or hyperlinked in the bibliographic record, the MFHD or both in the UC;

c) Whether the 856 field should be displayed and/or hyperlinked in the bibliographic record, the MFHD or both in a library's local OPAC;

d) How to treat "shareable" and "non-shareable" URLs;

e) Whether to archive obsolete URLs;

f) How to treat multiple, active URLs;

g) Whether to include 856 data in the 866 field (as had been done in DRA).

Chew Chiat Naun prepared a paper in which he summarized the standards and issues concerning the 856 field (see Appendix 3). It describes the differences between the DRA environment and the Voyager environment, e.g., URLs in the 856 field of the MFHD can be hotlinked in WebVoyage where they could not be in DRA's Web2. It also contains an explanation of the effects of bulk import on the 856 field and the impact on the UC of storing and displaying 856 information.[3]

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[3] Appendix 3: MARC 856 field: a summary of standards and issues (Chew Chiat Naun, member of the IUAG Cataloging Electronic Resources Task Force)

A summary of the discussion and recommendation for each of these topics follows.

## (a) Verifying that URLs are current:

The Task Force's discussion on verifying URLs centered on workload and the staff time needed. In that a URL for a title held by a library can be considered the title's call number, the Task Force noted the importance of providing accurate information for access. Several of the Task Force members indicated that they were being mandated by their Public Services staff to verify URLs. Although the Task Force recognizes time and staff constraints, it believes that current URLs are imperative to providing good library service. **Therefore, the Task Force strongly recommends (R15) that each library be responsible for keeping current the URL(s) in the subfield u of the 856 field in both its bibliographic records and the MFHD records that reflect its electronic holdings.**

**Furthermore, the Task Force recommends (R24) that an appropriate IUAG task force investigate software that can review and validate URLs.**

## (b) Displaying (and Hyperlinking) the URL in the bibliographic record, MFHD, or both, in the Universal Catalog

MARC 21 allows for the 856 field to be recorded in both the bibliographic record and the holdings record (MFHD). The Task Force weighed the pros and cons of having this information appear in only the bibliographic record, in only the MFHD, or in both the bibliographic *and* the MFHD records. Related issues were if the Task Force recommended that the 856 be *included* in the bibliographic record, should the 856 field be *displayed* in the UC? If displayed, should it be hyperlinked?

In the Task Force's view, the URL for a held title is equivalent to a call number. Active call numbers are part of the MFHD. Therefore, in the Task Force's opinion, the 856 field containing a current URL relating to a library's holdings should be included in the MFHD.
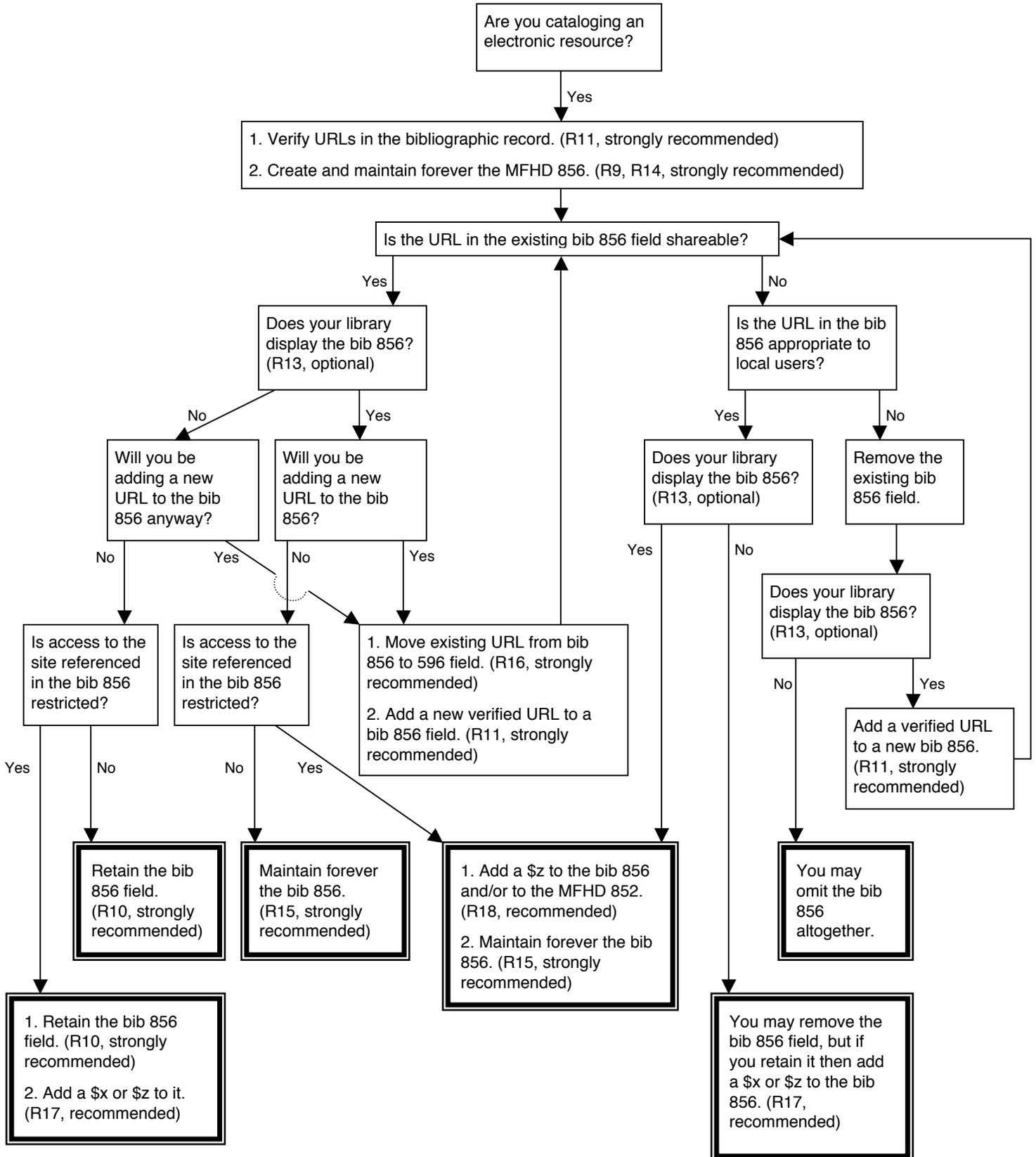
Many bibliographic records for e-resources will come into a local catalog and/or the UC with 856s already in the bibliographic record. Acknowledging that these URLs might be different from those used by the local library and that a library has constraints on its time to verify these, the Task Force considers it more important to update and hyperlink (where appropriate) URL data in the 856 of the MFHD than to update the 856 in the bibliographic record. This opinion is almost the reverse from that formed when ILCSO used DRA. This is due to the fact that WebVoyage supports hyperlinked URLs in the MFHD where DRA's Web2 could not. The issue of hyperlinking URLs is discussed further in the next topic.

In a consortial resource sharing environment where identifying what a particular library owns is a high priority, the Task Force noted that catalogers' focus will be on the MFHD rather than the bibliographic record. Recognizing that an unmaintained 856 in the bibliographic record may contain a URL that conflicts with URLs in MFHDs, the Task Force agreed that 856 fields should be suppressed in the UC. (Note: a library is able to decide for itself whether it wishes to do this in its own OPAC.) **Therefore, in the UC, the Task Force strongly recommends (R12) that URLs in the bibliographic record's 856 field be suppressed from display and that the 856 fields of MFHDs (containing the URL specific to the holding library) be displayed and hyperlinked.**

The Task Force recognizes, however, that it will take some time before 856 fields are recorded in all appropriate MFHDs. Therefore, the date by which to suppress 856 fields in the Universal Catalog's bibliographic records will need to be set in consultation with the OPAC Customization Task Force and the Consortial Cataloging and Authority Control Committee.

## (c) Displaying (or Hyperlinking) the URL in the bibliographic record, MFHD, or both, in Local Catalogs

The Task Force agreed this should be a local decision, often based on whether the title could be shared or whether access was limited to the local library alone. Therefore, **the Task Force recognized the display and hyperlinking of URLs as optional (R13) in a library's local catalog. The Task Force strongly recommends, however, (R10) that shareable URLs be included in both bibliographic and MFHD records.** In determining how to treat URLs in the local catalog, the following decision tree might be useful.

Are you cataloging an electronic resource?

→ Yes

1. Verify URLs in the bibliographic record. (R11, strongly recommended)

2. Create and maintain forever the MFHD 856. (R9, R14, strongly recommended)

Is the URL in the existing bib 856 field shareable?

Yes / No

**Yes branch:**

Does your library display the bib 856? (R13, optional)

No / Yes

**No:** Will you be adding a new URL to the bib 856 anyway?

No / Yes

**Yes:** Will you be adding a new URL to the bib 856?

No / Yes

Is access to the site referenced in the bib 856 restricted?

Yes / No

Is access to the site referenced in the bib 856 restricted?

No / Yes

1. Move existing URL from bib 856 to 596 field. (R16, strongly recommended)

2. Add a new verified URL to a bib 856 field. (R11, strongly recommended)

**No branch:**

Is the URL in the bib 856 appropriate to local users?

Yes / No

**Yes:** Does your library display the bib 856? (R13, optional)

Yes / No

**No:** Remove the existing bib 856 field.

Does your library display the bib 856? (R13, optional)

No / Yes

Add a verified URL to a new bib 856. (R11, strongly recommended)

**Terminal boxes:**

1. Retain the bib 856 field. (R10, strongly recommended)
2. Add a $x or $z to it. (R17, recommended)

Retain the bib 856 field. (R10, strongly recommended)

Maintain forever the bib 856. (R15, strongly recommended)

1. Add a $z to the bib 856 and/or to the MFHD 852. (R18, recommended)
2. Maintain forever the bib 856. (R15, strongly recommended)

You may omit the bib 856 altogether.

You may remove the bib 856 field, but if you retain it then add a $x or $z to the bib 856. (R17, recommended)

17

## (d) "Restricted" URLs

The Task Force recognizes that some libraries create their own web gateways to electronic resources and that other libraries are not able to access these resources by using the URL for the gateways. **In cases where access to a given resource is restricted, the Task Force recommends (R18) that a statement of restriction be given in a public note field (856 subfield z or 852 subfield z). (See also R17.)**

## (e) Archiving URLs

The Task Force discussed at some length the value of retaining obsolete URLs in bibliographic records. The discussion included whether obsolete URLs would have any research value, as well as the appropriate coding of this information in the 856 field if they were retained. The Task Force seriously considered placing such information in the 856 subfield z. However, one of the Task Force members found a Library of Congress Rule Interpretation (LCRI) that stated that LC was using the subfield z to store URLs for titles no longer available.[4] The Task Force, therefore, felt that to use the subfield z for storing obsolete URLs went against LC precedent. Furthermore, the Task Force noted that there was nothing in the standards or literature that supported archiving obsolete URLs. **The Task Force, therefore, recommends (R19) that libraries do not use the 856 field for archiving obsolete URLs and not concern themselves with archiving obsolete URLs elsewhere, except perhaps to meet some local research need the Task Force failed to anticipate.**

## (f) One or multiple 856 fields for multiple URLs

The Task Force considered whether to recommend repeated subfield u's in the 856 field for titles that had more than one URL or to recommend separate 856 fields for each URL. While members agreed there were certain virtues to having everything consolidated into one 856 field, the current version of Voyager Bulk Import imposes a 200-character limit on a single 856 field, and the current version of WebVoyage makes it difficult to distinguish one subfield u from the next in a single 856 field. Likewise, the Task Force considered whether to recommend repeated 856 fields in a single MFHD or to recommend separate MFHDs for each 856 field. The 2001.1 version of WebVoyage makes it difficult to associate, visually, separate runs of holdings with the URLs that correspond to them unless holdings statements and URLs are paired together in separate MFHDs. Members also notedthat separate MFHDs would be created if there were two different call numbers. Therefore, **if there are multiple active URLs for a serial title, all of which lead to some part of a library's online holdings, the Task Force strongly recommends (R20) that catalogers create a separate MFHD for each applicable URL, unless they believe they can achieve a sufficiently clear OPAC display using just a single MFHD. If there are multiple active URLs for a monographic title, all of which lead to some part of a library's online holdings, the Task Force recommends (R21) that catalogers create a separate MFHD for each applicable URL. If a library has compelling reasons to use a single MFHD for a monographic title, or if a library is convinced that a single MFHD for multiple, active URLs for a serial title would not result in a confusing OPAC display, then the Task Force strongly recommends (R22) that catalogers create separate 856 fields for each applicable URL in the MFHD.**

## (g) Including 856 field data in the 866 field

The practice of including some 856 field data in the 866 field was established in the DRA system because URLs in the MFHD 856 field could not be hyperlinked. Since this is not an issue in

---

[4] Library of Congress Rule Interpretations, 2nd edition. Update #2, 2002 (June 2002).

Voyager, **the Task Force strongly recommends (R23) that 856 data should not be included in the 866 field of the MFHD.**

# Recommended Best Practices for ILCSO

There are three degrees of recommendation in what follows.

> "Strongly recommends" – The Task Force hopes the recommendation will be followed without exception.

> "Recommends" – The Task Force's recommendation should be followed if at all possible.

> "Optionally" – The Task Force leaves a final decision up to the individual library.

The Task Force is aware of the potentially significant impact of emerging technology on cataloging and display of electronic resources. As other groups within ILCSO investigate emerging technology, there is reason to believe that some recommendations made by this Task Force could require re-evaluation at a future date.

## Single versus Multiple Records

Should catalogers use a single record for all physical manifestations of a title or a separate record for each physical manifestation?

## Monographs and monographic sets (e.g., encyclopedias)

*R1*

**The Task Force recommends creating separate bibliographic records for monographs or monographic sets issued in electronic form (e.g., one for the print version, one for the electronic version)**. The Task Force recognizes, however, that an institution may have reasons to use a single bibliographic record for multiple formats of the same monographic title, especially if records are imported from vendors like Marcive, and acknowledges that it may be difficult for some institutions to follow this recommendation.

## Serials, journals, newspapers, and other continuing resources

The Task Force began by defining for itself what types of electronic serial resources were of primary concern to catalogers. It narrowed its focus to "e-journals" (please see Glossary). After examining a number of existing standards and national practices, and based on a previous polling of ILCSO libraries, the Task Force has decided it cannot make a recommendation about whether multiple serial formats should be represented in a unified or in separate bibliographic records.

*R2*

**The Task Force leaves each ILCSO library the option to use a single record for all physical manifestations of a serial title or to use separate records for each manifestation.** The Task Force urges that this decision be based, to the extent possible, on current national cataloging practice. See Appendix 2 for a summary and analysis of the issues in the single-versus-separate record debate.

*R3*

**If the single record approach is used, the Task Force strongly recommends that the library create a separate MFHD for each physical format of a title.**

*R4*

**If the separate record approach is used for serials, the Task Force recommends using the aggregator-neutral record concept** (see Glossary) **developed and implemented by CONSER for electronic serials available from one or more providers.**

*R5*

**The Task Force recommends that each MFHD representing an electronic resource be assigned a location specifically designated for electronic resources rather than for any other physical format. The Task Force recommends that each library make its own decisions about how many such locations to create and what names to give them.**

*R6*

**The Task Force strongly recommends that when separate bibliographic records are used for the print and electronic versions:**

> **each bibliographic record should contain a 530 and 776 field;**
>
> **the bibliographic record for the electronic version should contain a 007 field; and**
>
> **the MFHD for the electronic version should contain a 007 and an 856 field. (See also R9.)**

Example of bibliographic record for print version:

```
245 00 Journal of machine learning research.

530     Also available online.

776 1   $t Journal of machine learning research (Online) $x 1532-
        4435 $w (DLC) 00212568 $w (OCoLC) 45891959
```

Example of bibliographic record for electronic version:

```
007 c $b r

245 00 Journal of machine learning research $h [electronic
        resource].

530     Also available in print.

776 1   $t Journal of machine learning research $x 1533-7928 $w
        (DLC) 2001212199 $w (OCoLC)45351963
```

*R7*

**The Task Force strongly recommends that when a single bibliographic record is used for both versions:**

> **the bibliographic record should contain a 007 and a 530 field but not necessarily a 776 field;**
>
> **a separate MFHD for each physical format should be created; and**
>
> **the MFHD for the electronic version should contain a 007 and an 856 field. (See also R9.)**

Example of single bibliographic record for both versions:

```
007 c $b r

245 00 Journal of machine learning research.

530    Also available online.
```

*R8*

**Optionally, a library may choose to include a 530 note in a record even if it does not hold the alternative version, since its patrons may have access to another library that holds that version.**

## The 856 Field

The Task Force recognizes that each ILCSO library can, within the ILCSO WebVoyage Customization Guidelines, decide to make local decisions for its own OPAC and that these decisions might vary from the consortial decisions made for the display of information in the Universal Catalog (UC). In coming to its conclusions, the Task Force was extremely conscious of how its decisions might affect both local catalogs and the UC.

*R9*

**The Task Force strongly recommends that libraries place in the 856 field of the MFHD record the URL appropriate to their local users.** (In WebVoyage, unlike DRA's Web2, the URL can be hyperlinked in the MFHD.) The URL appropriate to local users may or may not be "shareable."

*R10*

**The Task Force strongly recommends that libraries retain any extant shareable URLs** (see Glossary) **in the bibliographic record. Libraries may opt to retain these URLs in the 856 field of the bibliographic record or in a 596 field[5]. Libraries would use the 596 to retain a URL if they display the 856 field from the bibliographic record in their local catalog and if the URL that is already in the record appears to be shareable but is not appropriate for local users.**

*R11*

**The Task Force strongly recommends that all URLs be verified at the time they are added to the catalog.**

*R12*

**The Task Force recommends that subfield u of the 856 field in bibliographic records in the Universal Catalog display as text only, not as a hyperlink, beginning immediately, and strongly recommends that the 856 field of the bibliographic record be suppressed**

---

[5] The Task Force has selected the 596 local note field for this purpose. Due to the size of ILCSO's bibliographic databases it has not been possible to generate a report to ascertain absolutely that the 596 field has never been used for another, incompatible purpose in the past by any member library. The Task Force suspects it has not been, but intends to conduct a brief email survey to make sure that local documentation and institutional memories confirm what incomplete reports against the databases suggest: that the 596 field could be used to store shareable but not locally appropriate URLs, without introducing a conflict with past, present, or planned practices regarding local notes.

**altogether from display in the Universal Catalog after a suitable transition period. (The 856 fields from local MFHDs would continue to display as hyperlinks in the Universal Catalog.)**

### *R13*

**The Task Force recommends that local libraries continue to decide whether or not to display bibliographic record 856 fields, as allowed by current OPAC Customization Task Force Recommendations.**

### *R14*

**The Task Force strongly recommends that URLs in MFHD 856 fields be kept current.**

### *R15*

**If a library chooses (R13) to configure any of its OPAC Views to display data from 856 fields of bibliographic records, then the Task Force strongly recommends that the library keep the 856 fields of its bibliographic records current as well as those of its MFHD records.**

### *R16*

**The Task Force strongly recommends that when a library adds an 856 field containing a non-shareable URL** (see Glossary) **to a bibliographic record, any shareable URL in an existing 856 field be transferred to a 596 field. This recommendation applies whether or not the library currently displays the 856 field in the bibliographic record.**

Example:

The library has a URL pointing to its own electronic journal registry but has copied the original sharable URL to the 596 field:

```
596     $u http://www.jstor.org/journals/00028282.html

856 40 $u http://www.library.uiuc.edu/ersearch/get.php?rid=1546
```

### *R17*

**The Task Force recommends that, if catalogers add a non-shareable URL to a bibliographic record, they add a note in the 856 subfield x or z identifying that URL with their institution.**

Example:

```
856 40 $u http://www.lib.colum.edu/search/journalid=108 $x COL
```

> NOTE: In the current version of Voyager, any text in the 856 $z will display in WebVoyage in place of the URL in $u.

### R18

**The Task Force recommends that, if catalogers add a shareable URL to a bibliographic record, or encounter one already included in the record, and if they know that access to the resource is restricted (to users affiliated with a particular institution, for instance), they add a statement of restriction in a public note field (856 subfield z or 852 subfield z).**

Examples:

```
852 0  $b main $h PS3569.E85 $i C37 $t 1 $z Access available only
       to authorized users.

856 40 $u http://www.jstor.org/journals/00028275.html $z Access
       is available only to authorized users.
```

NOTE: In the current version of Voyager, any text in the 856 $z will display in WebVoyage in place of the URL in $u.

### R19

**The Task Force recommends that libraries use neither the 856 field nor any other field for archiving obsolete URLs in the library catalog.**

### R20

**If there are multiple active URLs for a serial title, all of which lead to some part of a library's online holdings, the Task Force strongly recommends that catalogers create a separate MFHD for each applicable URL in cases where a single MFHD would result in a confusing OPAC display.**

Example 1 (separate MFHD coding recommended):

```
852 0  $b e-resource $h ML1 $i .N5 $t 1

856 41 $u
       http://www.ingentaselect.com/rpsv/cv/ucp/01482076/contp1-
       1.htm $z Click here for online access

866 31 $80 $a v.24:no.3(2001:spring)-


852 0  $b e-resource $h ML1 $i .N5 $t 2

856 41 $u http://www.jstor.org/journals/01482076.html $z Click
       here for online access

866 31 $80 $a v.1(1977)-v.23(1999)
```

Example 1 results in an ILCSO-Standard OPAC display like this:

*Institution:* ///////////////

*Location:* Online Resources

*Call Number:* ML1 .N5

*Copy:* 1

*Related URL:* Click here for online access
http://www.ingentaselect.com/rpsv/cw/ucp/01482076/contp1-1.htm

*Library Has (Summary):* v.24:no.3(2001:spring)-

---

*Institution:* ///////////////

*Location:* Online Resources

*Call Number:* ML1 .N5

*Copy:* 2

*Related URL:* Click here for online access
http://www.jstor.org/journals/01482076.html

*Library Has (Summary):* v.1(1977)-v.23(1999)

Example 2 (single MFHD coding, acceptable alternative):

```
852 0   $b remele $k Internet $h PS1

856 40 $u http://muse.jhu.edu/journals/alh/ $z Link to American
       literary history (Project Muse)

856 40 $u http://www.jstor.org/journals/08967148.html $z Link to
       American literary history (JSTOR)

856 40 $u http://www.ingenta.com/journals/browse/oup/alhist $z
       Link to American literary history (Ingenta)

856 40 $u http://www3.oup.co.uk/alhist/ $z Link to American
       literary history (Oxford Journals)
```

Example 2 results in an ILCSO-Standard OPAC display like this:



*Institution:* ///////////////
*Location:* Electronic Resource, see related URL
*Call Number:* Internet.
PS1
*Copy:* 1
*Related URL:* Link to American literary history (Project Muse)
Link to American literary history (JSTOR)
Link to American literary history (Ingenta)
Link to American literary history (Oxford Journals)
http://muse.jhu.edu/journals/alh/
http://www.jstor.org/journals/08967148.html
http://www.ingenta.com/journals/browse/oup/alhist
http://www3.oup.co.uk/alhist/

*R21*

**If there are multiple active URLs for a monographic title, all of which lead to some part of a library's online holdings, the Task Force recommends that catalogers create a separate MFHD for each applicable URL.**

*R22*

**If a library has compelling reasons to use a single MFHD for a monographic title (that is, if a library cannot follow recommendation R21), or if a library is convinced that a single MFHD for multiple, active URLs for a serial title would not result in a confusing OPAC display (see R20), then the Task Force strongly recommends that catalogers create separate 856 fields for each applicable URL in the MFHD.**

*R23*

**The Task Force strongly recommends that, unlike the recommendation for DRA, 856 data not be included in the 866 field of the MFHD.**

## Related Recommendations

*R24*

**The Task Force recommends that an appropriate IUAG task force investigate software that can review and validate URLs in the library catalog.**

*R25*

**The Task Force recommends that IUAG facilitate one or more peer-to-peer training sessions on the application of these recommendations, by and for practicing ILCSO catalogers.** The cataloger-trainers (or session leaders) would be responsible for stressing adherence to current national cataloging standards as well as Task Force recommendations.

*R26*

**The Task Force recommends that the cataloger-trainers of the peer-to-peer training sessions (see R25) be responsible for distilling training materials from this Task Force report.**

*R27*

**The Task Force recommends that ILCSO explore the possibility of developing a program that would automate portions of the labor-intensive task of transferring data retrospectively from 856 fields in a bibliographic record to 856 fields in the appropriate MFHD.**

*R28*

**The Task Force recommends that the IUAG continually assess options for improving Voyager's duplicate detection scheme to prevent the inappropriate overlay of bibliographic records in the Universal Catalog.** This occurs primarily when sets of purchased records without OCLC numbers are loaded. It confuses library staff as well as patrons.

*R29*

**The Task Force recommends that libraries not create item records for electronic resources. (The single exception to this recommendation is the e-item record used in Voyager reserves.)** Item records are not needed for online resources since online resources do not circulate in the traditional sense of the word. Furthermore, the presence of item records prevents the use of some kinds of batch/bulk processing of bibliographic and holdings records.

*R30*

**The Task Force endorses the work of the IUAG Consortial Cataloging and Authority Control Committee (CCAC) on the "Cooperative Cataloging Guidelines" and strongly recommends that ILCSO libraries adhere to the Guidelines, particularly with regard to appropriate use of non-OCLC records from the Universal Catalog.**

*R31*

**The Task Force recommends that the IUAG commission a further report, from either CCAC or a new task force, to examine the implications of using records obtained from vendors other than OCLC, and to propose guidelines for the acceptance, use and maintenance of these records.**

*R32*

**The Task Force strongly recommends adding 776 $x to the consortial keyword ISSN search definition.** Many abstracting and indexing sources are inconsistent in their use of print and electronic ISSNs, and the addition of 776 $x to the ISSN index will maximize the chances of successful searching or linking from online abstracting and indexing sources into the OPAC.

> Example: The record below for the print version of *Oncology Nursing Forum*, with the ISSN for alternate format (the electronic format) appropriately coded in the 776 $x field, would not be retrieved by an eISSN-based link from any bibliographic database unless the 776 $x had been indexed for ISSN searches.

```
022 0  |a 0190-535X

035    |a (OCoLC)ocm04661240

245 00 |a Oncology nursing forum.

776 1  |t Oncology nursing forum (Online) |x 1538-0688 |w (DLC)
       2001211435 |w (OCoLC)48561343
```

# Glossary

**856 field:** The field in the MARC format (MARC 21) that contains the information required to locate electronic information. Subfield u contains the Uniform Resource Identifier. Notes concerning the URL can be found in subfields x (non-public note) and z (public note). The 856 field can be found in both the bibliographic record and the MFHD.

**Aggregator-neutral record:** From the FAQ on aggregator-neutral records on the CONSER web page: "A bibliographic record that is separate from the print that covers all versions of the same online serial on one record. The aggregator-neutral record has been defined for [electronic] serials available by one or more providers. By creating one record that can be used for all aggregations, records will not need to be updated or deleted to reflect [aggregator] changes and far less maintenance will be required." For example, the publisher and dates will be that of the original serial, as found on the copy being described, as opposed to the digitizer and dates of digitization.

**CONSER:** Cooperative Online Serials Program.

**Direct access electronic resources:** The Task Force adopted this definition from the Glossary in the AACR2: The use of electronic resources via carriers (e.g. discs/disks, cassettes, cartridges) designed to be inserted into a computerized device of its auxiliary equipment. See also "Remote access electronic resources."

**Display:** A field (notably the 856 field for the purposes of this document) is visible in WebVoyage.

**Dummy URL**: A URL that is included in a record not in order to provide a link to a resource, but to act as a placeholder or for other technical reasons.

**Electronic journals or e-journals:** The Task Force believes that not all subscription-based periodical full-text databases can be called e-journals. Only those with the basic features of print journals—and that can be acquired individually or through a group/aggregator database—should be categorized as e-journals. Examples of typical e-journals are *nature.com*; or titles in OCLC's *ECO*, JSTOR, and Project Muse. E-journals should have the following features.

> Perpetual access. Publishers/vendors have a permanent archive so that subscribers can still access what they have paid for after a subscription is discontinued, or subscribers can load the database locally after the subscription is discontinued.

> Subscribers know the titles they purchase and can either choose the title they want to purchase or choose the package by subject or group.

> Have a persistent journal-specific URL that can be cataloged and can lead users directly to the journal title, not the aggregator's database page.

> Have a table of contents.

> Can be browsed.

Another type of electronic resource that does not qualify as an electronic journal is a full-text index. Examples of full-text indexes include *ABI/INFORM* (via FirstSearch), *LexisNexis Academic* and *Factiva*. The features of this type of electronic resource are:

> Unstable/dynamic. Subscribers may or may not be notified of their frequent changes in content.

> Once journals are removed or the subscription is discontinued, access is no longer available. There is no permanent archive. No local installation or downloading is allowed.

> Have no table of contents.

> Cannot be browsed.
>
> Do not have persistent journal-specific URL so that catalog records cannot direct users to a journal's title page.

A third type of electronic resource can fall in between these two. It may have or lack some of the features of either of the other two. It tends to be more like full-text indexes. Some have some kind of table of contents but the journals there are as unstable as typical full-text indexes mentioned above.

Although the Task Force concentrated on e-journals when crafting its recommendations for cataloging electronic serials, its recommendations could apply to other electronic serial resources if libraries have chosen to catalog them.

**Electronic resource:** The Task Force adopted this definition from the Glossary in the AACR2: Material (data and/or program(s)) encoded for manipulation by a computerized device. This material may require the use of a peripheral directly connected to a computerized device (e.g., CD-ROM drive) or a connection to a computer network (e.g., the Internet). See also "Direct access electronic resources" and "Remote access electronic resources."

**Hyperlinked (hotlinked):** When the URL in an 856 field is hyperlinked a user who displays the record in a web browser can click on the field and connect directly to the resource identified.

**MFHD:** MARC Format for Holdings Data, pronounced "Muff Head." That portion of MARC 21 that deals with data that represent the specific enumeration (e.g., volumes) and chronology (e.g., years) held by a library. Thus, used synonymously for "a holdings record."

**Multiple versions:** The issuing of a single title in multiple formats (i.e., a title that is issued in print, on microfilm or microfiche, or electronically). There has been considerable debate in the library community whether a single bibliographic record should be used for all versions of a title (one title, many versions) or if each version should have its own bibliographic record (multiple records for the same title).

**Non-shareable URL:** A non-shareable URL is one that will work only for users affiliated at a particular institution. Such URLs will usually include a proxy string or point to a local directory. They will not work for users affiliated with a different institution, even if their home institution has a subscription to the same title from the same source.

*Examples:*

http://ezproxy.lib.monash.edu.au/login?url=http:llmuse.jhu.edu/journals/journal_of_the_history_of_ideas/

http://www.library.uiuc.edu/ersearch/get/php?rid=3707

**Obsolete URL:** A URL which is no longer valid for any user, either because the resource no longer exists or because it has been moved to another web location.

**Option B+:** The initial term for the CONSER's aggregator-neutral record recommendation.

**Remote access electronic resources:** The Task Force adopted this definition from the Glossary in the AACR2: The use of electronic resources via computer networks. See also "Direct access electronic resources."

**Shareable URL:** A shareable URL is one that will work for users affiliated with any institution provided only that the institution has a subscription and, therefore, access rights. Typically, the URL will be a publisher or aggregator URL that works for any user authenticated by IP range or password.

*Examples:*

http://firstsearch.oclc.org/journal=0003-3790;screen=info;ECOIP

http://www.blackwell-synergy.com/issuelist.asp?journal=vaa

**Suppress:** A field (notably the 856 field for the purposes of this document) cannot be seen in WebVoyage, but it can be searched. The field can be seen in WebVoyage's MARC view and in Voyager staff clients.

**Uniform Resource Identifier (formerly Locator) or URL:** An Internet protocol that provides electronic access data in a standard syntax. These data can be used for automated access to an electronic item using one of the Internet protocols.

**View:** A configurable display of bibliographic and/or holdings data within WebVoyage. The ILCSO-Standard "Full View" is documented at http://office.ilcso.illinois.edu/Reports/vispac/020523_dis_cfg.html.

## Appendix 1:
## Multiple Versions: Single Or Multiple Bibliographic Records As Recommended by National and International Standards

| SOURCE | RECOMMENDATION |
|---|---|
| **AACR2 Revised** | AACR2 (2002 rev.) does not explicitly prescribe single or multiple record treatment for electronic versions. The "cardinal principle" (0.24) of earlier editions that the description should be based on the class of material to which the item belongs has been weakened in the 2002 revision to an injunction to "bring out all aspects of the item being described, including its content, its carrier, its type of publication …"<br><br>The new Chapter 9 on electronic resources and Chapter 12 on continuing resources do not make any specific ruling about the use of separate or combined records. If any kind of combined record were to be adopted, however – whether a combined record for print and electronic versions or a combined record for different electronic versions as proposed by CONSER – the provisions on sources of information (9.0B, 12.0B) would need to be interpreted with some latitude, as would the rule that records for remote access resources should have no physical description area (9.5). |
| **ANSI/NISO Z39.71-1999: Holdings Statements for Bibliographic Items** | Does not recommend cataloging standards, only supports them. Therefore, it is written to accommodate the use of either a single bibliographic record for each physical format or multiple records, one for each format owned by a library.<br><br>ANSI/NISO Z39.71-1999. Holdings Statements for Bibliographic Items http://www.niso.org/standards/std_lib_management.html#Z39.71 |

| SOURCE | RECOMMENDATION |
|---|---|
| **CONSER Cataloging Manual 2002** | 31.2.5 The decision about whether to use single or multiple records "must be made by individual libraries." CONSER points out that "it is not possible to require a library to catalog a particular online version and it is independently valid to note facts about an online version in the record for different versions." |
| | The CONSER Cataloging Manual provides some "rules of thumb" which "express collective experience" as to when the "single-record approach is a viable choice" and when separate records may be more "useful." In summary, libraries may choose to use a single record when original and online versions are equivalent in content, or when the online version falls sufficiently short of full content not to warrant cataloguing separately. "Separate records are recommended when the online version has significant additional content not present in the original" such that they can no longer be considered to be equivalent. However, "separate records are always a permissible option." |
| | It may be worth noting CONSER's guidelines for titles that *change* their medium (although it is important to distinguish such cases from the main type of case considered here, which is titles that are simultaneously published in more than one version): |
| | 16.4.1.a **Major changes**. In general, a change in the physical medium of the serial is a major change when the change would result in a change at the level of the GMD (e.g., print to electronic resource) or SMD (e.g., paper to microfiche, microfiche to microfilm, CD-ROM to online). The new record is necessary because of differences in the fixed fields and description (particularly the physical description, field 300.) |
| | CONSER does recommend using the same record when an online version offers alternative file formats: |
| | 31.2.4 **Remote access electronic serials, Multiple document formats and access methods:** According to CONSER policy, do not create separate records for different file formats. CONSER policy is to create one record with a note (usually field 516) that lists the various document formats in which the electronic serial has been issued. |
| | **Note**: Since the publication of the CONSER Cataloging Manual, 2002 ed., CONSER has adopted the aggregator-neutral record concept, according to which records representing different aggregators' versions of the same title will be consolidated into a single record for the electronic version with any variant aggregator titles in 246 fields. This proposal also includes a recommendation to include the ISSN of the print version in 022 $y as an interim measure. The print version will continue to be cataloged on a separate record. |
| | CONSER Aggregator-neutral records: |
| | http://www.loc.gov/acq/conser/agg-neutral-recs.html |
| | CONSER Aggregator-neutral records: creation and modification: |
| | http://www.loc.gov/acq/conser/agg-neut-inst.html |

| SOURCE | RECOMMENDATION |
|---|---|
| **ISBD(CR): International Standard Bibliographic Description for Serials and Other Continuing Resources** | ISBD(CR), like CONSER, has guidelines covering changes of medium. But again these guidelines do not cover serial titles published simultaneously in print and online:<br><br>0.12 Changes requiring a new description.<br><br>0.12.2.3 and 0.12.3.2 When the physical medium changes.<br><br>ISBD (ER): International Standard Bibliographic Description for Electronic Resources http://www.ifla.org/VII/s13/pubs/isbd.htm<br><br>ISBD(CR): International Standard Bibliographic Description for Serials and Other Continuing Resources http://www.ifla.org/VII/s13/pubs/isbdcr-final.pdf |
| **Library of Congress: Draft Interim Guidelines for Cataloging Electronic Resources** | B19.4.5.2.1 Multiple Manifestations (Electronic Resources) Policy for Applying Single/Multiple Record Approach<br><br>"**Directly accessed manifestation**: In cataloging a directly accessed resource that is another manifestation of a work, employ a multiple-record approach (represent each manifestation by a separate record)."<br><br>"**Remotely accessed manifestation**: In cataloging a remotely accessed electronic resource that is another manifestation of an LC collection, employ a single-record approach…"<br><br>"**Remotely accessed manifestation (one-to-one reproduction)**: In cataloging a remotely accessed electronic resource that is a one-to-one electronic reproduction of another item, employ a single-record approach…"<br><br>"**Other remotely accessed manifestation**: In cataloging a remotely accessed electronic resource that is neither of the two categories of remotely accessed resources mentioned immediately above … employ a multiple-record approach…"<br><br>B19.4.6.2 states that "LC applies the CONSER single record option only for one-to-one reproductions of serials (e.g. JSTOR …) and in other cases creates separate records."<br><br>Draft Interim Guidelines for Cataloging Electronic Resources http://www.loc.gov/catdir/cpso/dcmb19_4.html |

| SOURCE | RECOMMENDATION |
|---|---|
| **MARC 21 Concise Format for Bibliographic Data and MARC 21 Concise Format for Holdings Data** | Does not recommend cataloging standards, only supports them. Therefore, it is written to accommodate the use of either a single bibliographic record for each physical format or multiple records, one for each format owned by a library. |
| | Note, however, that current OCLC, CONSER, and LC guidelines emphasize content over carrier in that both print and electronic versions are coded as the same record type (leader/06), but with different (or optional) additional characteristics also coded. See the summary of MARC coding guidelines below. |
| | It should also be noted that MARC specifically supports coding the 856 field for distinctions between the actual publication, a version (e.g. an online version) of the document, and a related resource, as well as providing a subfield ($3) for describing the relationship of the linked resource to the item described by the bibliographic record. (Unfortunately Voyager's OPAC does not make these distinctions apparent in its display of 856 hyperlinks. See Appendix 3.) |
| | MARC standards http://www.loc.gov/marc/ |
| | MARC 21 formats: guidelines for the use of field 856 http://www.loc.gov/marc/856guide.html |
| **Cataloging Electronic Resources: OCLC-MARC Coding Guidelines** | **Separate Records Versus Single Record**: Creating separate records for an item is preferable when both remote access electronic versions and tangible or direct access (including but not limited to, print and other non-electronic) versions exist. You may, however, find a single record approach is better for your local environment. OCLC recommends that you verify the impact of these options with your local system vendor and other partners prior to implementation. |
| | OCLC: Cataloging Electronic Resources: OCLC-MARC Coding Guidelines |
| | http://www.oclc.org/support/documentation/worldcat/cataloging/electronicresources/default.htm |

## Summary of MARC Coding Guidelines

The table below summarizes OCLC, CONSER, and LC MARC coding guidelines for the case of a serial issued in print and electronic versions that are considered equivalent in content. The guidelines are concerned with how best to code MARC records to (a) characterize the online aspect of serials available electronically and (b) reveal the nature and availability of alternative versions of a serial publication and provide links to them. The table comes in three parts: the first two describe the coding applied when multiple records are used, and the third describes the coding applied when a single record is used. The table is supplied for the purposes of setting out the options available to IUAGCATER as well as providing a point of reference for considering the implications of particular options.

The table was pieced together from guidelines contained in the following documents:

> LC's Draft Interim Guidelines for Cataloging Electronic Resources.
> http://www.loc.gov/catdir/cpso/dcmb19_4.html

> CONSER Cataloging Manual 2002, Module 31

> CONSER's Use of fixed fields 006/007/008 and leader codes in CONSER records
> http://www.loc.gov/acq/conser/ffuse.htm

> Cataloging Electronic Resources : OCLC-MARC Coding Guidelines
> http://www.oclc.org/support/documentation/worldcat/cataloging/electronicresources/default.htm

Please note that a certain amount of interpretation and simplification was necessary in constructing this table, so it should be taken only as a broad outline of the approaches that these agencies have taken and not as an authoritative guide to their detailed procedures. This caution applies particularly to the LC guidelines.[6]

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[6] An important difference between the OCLC and CONSER guidelines on the one hand, and LC's on the other, is that OCLC and CONSER leave it up to the individual library (or consortium) to decide whether to use single or multiple records. LC, being a single institution, has explicit guidelines for its local catalog. Specifically, LC uses single records only for one-to-one reproductions of serials (DCM B19.5.2.2.1); its rules for online monographs and for other categories of online serials differ.

**Separate records: print (when electronic also exists)**

|  | OCLC | CONSER | LC |
|---|---|---|---|
| **Leader/06** | a:Language material | a:Language material | a:Language material |
| **006/00** | Do not code | Do not code | Do not code |
| **008/23**<br><br>**Form of item** | Do not code | No instruction | No instruction |
| **007** | Do not code | Do not code (except for accompanying material) | Do not code |
| **530** | Note electronic availability | Note electronic availability | Note electronic availability |
| **730** | Add electronic title if it differs | Add electronic title if it differs | No instruction |
| **776** | Link to electronic record (optional) | Link to electronic record | Link to electronic record |
| **856[7]** | Code as version (optional) | Code as version | Code as version (?) |

**Separate records: electronic (when print also exists)**

|  | OCLC | CONSER | LC |
|---|---|---|---|
| **Leader/06** | a:Language material | a:Language material | a:Language material |
| **006/00** | m:Electronic | m:Electronic | Do not code |
| **008/23**<br><br>**Form of item** | s:Electronic | s:Electronic | No instruction |
| **007** | c:Electronic resource | c:Electronic resource | c:Electronic resource |
| **530** | Note print availability | No instruction | Note print availability |
| **730** | Add print title if it differs | Add print title if it differs | No instruction |
| **776** | Link to print record (optional) | Link to print record | Link to print record |
| **856[6]** | Code as resource itself | Code as resource itself | Code as resource itself |

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[7] "Code as version" means to code it as 1; "code as resource itself" means to code the 856 second indicator as 0. The guidelines for this field are much simplified here; the original documents describe the coding options in more detail.

**Single record (for both print and electronic versions)**

|  | **OCLC** | **CONSER** | **LC** |
|---|---|---|---|
| **Leader/06** | a:Language material | a:Language material | a:Language material |
| **006/00** | Do not code | Do not code | Do not code |
| **008/23**<br><br>**Form of item** | Do not code | Do not code | No instruction |
| **007** | c:Electronic resource (optional) | c:Electronic resource (optional) | Do not code |
| **530** | Note electronic availability | Note electronic availability | Note electronic availability |
| **740** | Add electronic title if it differs | Add electronic title if it differs | Add electronic title if it differs |
| **776** | No instruction | Use $t, $x for e-ISSN if separate record does not exist | No instruction |
| **856** | Code as version | Code as version | Code [as version?] |

# Appendix 2:
# Multiple Versions: Issues Affecting the Single Versus Multiple Record Approach

With respect to the single versus multiple record approach to bibliographic records, the CatER Task Force has made the following recommendations:

- **The Task Force recommends (R1) that multiple (separate) bibliographic records should be used for monographs in electronic and print formats;**

- **The Task Force defers to each ILCSO library to decide for itself (R2) whether to use a single record for all physical manifestations of a serial title or to use separate records for each manifestation;**

- **When separate records are used for electronic serials, the Task Force recommends (R4) that ILCSO libraries use CONSER's "aggregator-neutral" record for all versions of an electronic serial;**

In the DRA environment of 2000/2001, the first CatER Task Force decided not to make a recommendation on which method to apply, believing that each library needed to choose the best method based on its patrons' needs and on considerations of acquisitions and interlibrary loan requirements. In the Endeavor environment of 2003 substantial changes have emerged in technology, national cataloging practices and vendor services. Another examination of the pros and cons of using the single versus multiple record approach was indicated. The Task Force based its decision on results from the survey, national cataloging standards, related vendor issues and the current ILCSO environment.

Comments from those responding to the survey conducted by the CatER Task Force leaned toward the single record method, but the decision to use a single record or multiple (separate) records for various versions of print and electronic titles had clearly not yet been settled. Nearly forty-eight percent of the fifty-three institutions and consortia responding to this question reported that they used the single record approach. A strictly multiple or separate record policy was the guideline for only fifteen percent of the respondents. However, in many cases, both methods were used, sometimes with various applications at the same institution. More than thirty-seven percent of those questioned used a combination approach that resulted from three factors:

A legacy collection of records that reflected variant policy guidelines;

A decision to treat monographs and serials differently;

The increasing availability of vendor-produced MARC record sets for electronic collections.

At the consortial level, there was a preference to use the single record for the shared union catalog. However, such attitudes were not universal. Some organizations allowed their institutional members to follow individual local policies. In at least one case, the consortium decided that separate records were preferable, explaining that many online versions of serials carried their own unique ISSNs that varied slightly or significantly from the print versions'.

Since most libraries indicated they were using national guidelines such as CONSER which have up to this point given them the option to make their own local decision regarding record approach, it was not surprising to find that individual institutions adopted a variety of policies and local practices. A typical instance in one cataloging unit included following a single record approach by adding MARC 007 and 530 fields for the electronic version to the record for the print version. However, this same institution kept separate records that were purchased from MARCIVE for both the print and electronic titles. At least three institutions based policy on whether the resource

was a serial or a monograph. Serials were cataloged using a single record while monographs were usually cataloged with separate records. Another institution noted that their approach depends on content. There, if the electronic version was a near facsimile of the print version, a single record would be used. Otherwise, separate records were recommended. It was difficult to determine from the data if there was a general movement to the separate record approach for print and electronic versions. The availability of vendor record sets, however, was definitely forcing the discussion of this issue and the evolution of these policies is likely to continue.

In part, new policies were first necessitated by the purchase of monographic record sets from e-book vendors. One consortium explained that in these circumstances, and in order to facilitate and give precision to the merging and overlay process, separate records were preferable. The proliferation of vendor-supplied records for electronic versions of print titles was an obvious way to address the "bulk cataloging process" for many institutions, and had a direct impact on policies relying on separate bibliographic records.

In the current ILCSO environment, libraries will be faced with deciding cataloging policy regarding single versus separate records for multiple versions of a title. Although the Task Force has made a recommendation for monographs (R1), it has decided not to make a recommendation about whether multiple serial formats should be represented in a unified or in separate bibliographic records (R2). The following table offers relevant issues directly affecting record choice; however, to the extent possible, all policies should be based on evolving national cataloging practice.

| SINGLE RECORD | MULTIPLE RECORD |
|---|---|
| Some library staff, especially those in public services, believe it is easier for both patrons and staff to understand the print and electronic holdings by accessing it "all in one." In such cases, a single record approach for a given version of a title will have the same OCLC number. | When using separate records, the Task Force recommends (R4) that CONSER practice be followed in using the aggregator-neutral record option. The aggregator-neutral record is a single record for all electronic versions of the serial. When using the aggregator-neutral record for all electronic versions of a serial title, libraries should use a separate record for the print version of that title. |
| A single record approach reduces patron confusion for ILL. ILL and document delivery staffs are more likely to be given the record for the print version. | Content may vary, sometimes significantly, between the print and electronic versions. Some libraries may decide the differences warrant a separate record approach. |
| In certain cases, when both print and electronic formats are owned, workflow for the cataloger can be much leaner. Appropriate fields are added to the records for the print version for the electronic title rather than creating an entirely separate record for the electronic version. | Purchasing separate, vendor-supplied bibliographic records for electronic resources that can be loaded via Bulk Import can be an efficient method for automating the entry and updating of electronic resources information in the OPAC. |
| Those institutions that have a legacy collection composed primarily of the single record approach for electronic and print materials may decide for the sake of consistency to continue the practice. | Those institutions that have used the multiple record approach up to this point may decide it makes sense to continue this approach. |

| SINGLE RECORD | MULTIPLE RECORD |
|---|---|
| The Task Force acknowledges that an institution may have reason to use a single record for multiple formats of the same monographic title (R1) such as in the case of government documents when a single record may be preferred. Many bibliographic records for government documents in paper or CD-ROM format contain related URLs or PURLs that provide electronic access to the full-text version of the title. In other types of materials, some libraries may choose to use a single record for a monograph made up of multiple parts. | The Task Force recommends (R1) that separate records be used for monographs in print and electronic versions. With the increasing use of vendor-supplied records for electronic monographs there is greater opportunity for consistent policy in the Universal Catalog. Patrons viewing holding displays in WebVoyage are more likely to understand clearly which institutions own either the print or electronic version of the monograph but not both. *The Task Force cautions institutions* (R30) *not to import a record from the Universal Catalog for any electronic resource unless they have licensed the use of the record itself from the relevant vendor, or are able to verify that the record itself is not subject to a vendor licensing agreement.* |
| The 2002 revision of AACR2 and the ISBD(CR) do not specifically prescribe separate bibliographic records for multiple versions of a title, recognizing instead the importance of local practice. LC applies the CONSER single record option only for one-to-one reproductions of serials, and in other cases creates separate records. | OCLC recommends creating separate records for an item when both remote access electronic versions and tangible or direct access versions exist, but then states that a single record approach may be an option. This is a transitional period when national guidelines and emerging technologies are not yet fully implemented. It may be advisable to use separate records until guidelines can be further refined by national cataloging policies. The potential impact of new OpenURL link server technologies such as SFX or LinkFinder*Plus* on record use in the ILCSO environment is not known at this time. |
| Traditionally, online abstracting and indexing databases link to holdings data in local catalogs on the basis of ISSNs. A&I source records often contain only a single ISSN, which is usually (but not always) the ISSN for the print version of a serial. The ISSN for alternate formats, which is properly coded in the MARC 776 field, cannot be retrieved unless the 776 field is indexed for ISSN searches. (See R32.) | ISSNs can vary between the print and electronic versions. When electronic serials are cataloged separately, each record should contain the appropriate ISSN in the 022 field, which is indexed in the current configuration of Voyager. Single ISSN searches launched from A&I databases will retrieve one or the other of the records (print or electronic), but not both records unless the ISSN for the alternate format is entered in the 776 $x and the 776 $x field is indexed. (See R6 and R32.) |
| In the current version of the duplicate detection program used by ILCSO, some electronic records that match records for the print version are incorrectly overlaying each other. This is an issue that the Consortial Cataloging and Authority Control Committee and ILCSO staff are investigating for resolution. | Using separate records in a consortial environment with appropriately configured duplicate detection programs may provide a more precise approach to the overlay process, especially when a one-for-one replacement is desired. |

# Appendix 3:
# MARC 856 Field: A Summary of Standards and Issues

by Chew Chiat Naun

Revised 25 June 2003

This paper is a summary (but only a summary) of standards, display and systems issues relating to the MARC 856 field in the ILCSO Voyager/Universal Catalog environment. This paper was written as background information in the early stages of the Task Force's deliberations and does not make specific reference to all of the Task Force's final recommendations.

## Bibliographic Records versus MFHD Records

URLs may be stored in the bibliographic record or the holdings record (also known as a MFHD), or both. Specifically, the MARC standard allows fields 841-88X to be used in either type of record. These are the MARC holdings fields, of which 856 is the electronic location and access field.

In DRA use of the 856 field was for all practical purposes restricted to bibliographic records. Although some libraries added 856s to MFHDs, DRA was unable to display these fields as live hotlinked URLs. By contrast, Voyager allows you to store and/or display URLs in either the bibliographic record or the MFHD.

In the ILCSO environment having the URL in the bibliographic record alone presents the following problem. Many URLs are institution-specific, either in the sense that some but not all ILCSO libraries license the resource the URL point to, or in the sense that the address will work only for users affiliated with a particular institution. This means that a user viewing a record in Universal Catalog (UC) will not immediately be able to tell if a resource is available to her: even if a resource is licensed by her institution, the URL may not work for her. And if it does work at one time that does not necessarily mean it will still work at a later time. That is because records in UC can be overlaid when a corresponding record is added or edited in a local catalog, and so the URL in UC may change. See **Types of URLs** below.

The proposal currently before IUAG CatER is to use MFHDs to store and display URLs. According to this proposal:

> UC will be configured to suppress the display of any URLs in bibliographic records, and to display and hotlink URLs in MFHDs only.

> The ILCSO Cataloging Electronic Resources Task Force will recommend to member libraries that URLs are included in 856 fields in MFHDs whether or not they are also present in the bibliographic records.

> Individual institutions would make their own decisions about whether to display 856 fields in bibliographic records in their local catalogs.

With this approach URLs would display in UC in the holdings display under the names of their respective institutions. This will solve the problem of institution-specific and overlaying URLs.

This proposal does, however, raise the following issues:

> Existing URLs are almost universally stored in the bibliographic record. To display properly in UC these records would need to be "retro-fitted" with URLs in the 856 field of the associated MFHDs.

> In libraries which have enabled the "URL thumbnail" option (in ILCSO implementations, the big red 'e'), the presence of an 856 URL in the bibliographic record will cause an icon

to display in title lists.[8] The icon will *not* display if the URL is only in the MFHD. The solution is to include the 856 in both places. The URL in the bibliographic record will continue to cause the icon to display in the title list even if the decision is taken not to display the URL in the OPAC record display. It should be noted, though, that there is a possibility that ILCSO will withdraw the thumbnail option for technical reasons some time in the near future.

MARCIVE and other sources of MARC records typically provide only bibliographic records, not MFHDs. It would be necessary to find a way to transfer the 856 data in these records to a MFHD. This issue is addressed in the section on **Data loading issues** below.

It may be advisable to adopt conventions regarding the use of MFHD data—particularly MFHD notes and call numbers—that make sense in a UC setting. See **Locations and call numbers** below.

## An Outline of the 856 Field

### Indicators

Like all MARC variable fields, the 856 has two indicators. The first indicator denotes the method of access, while the second indicator tells you whether or not the link takes you to the resource specifically described in the bibliographic record.

The value of the first indicator will usually be 4, for HTTP.

The second indicator will normally take one of the following values:

[Blank] - No information provided. The 856 fields of many records do not specify how the resource that you are linking to is related to the record you are viewing. Sometimes this information is given instead in a $3 subfield (see below).

0 - Resource. A second indicator value of '0' means that the record specifically describes the resource that the link will take you to. Typically this means that the record actually describes the electronic version and not a print equivalent. Thus the record for the electronic publication *Scholarly electronic publishing bibliography* is coded:

856 40 $u http://info.lib.uh.edu/sepb/sepb.html

1 - Version of resource. Typically used for an electronic version of a journal cataloged using the record for its print equivalent, as in the case of this JSTOR journal:

856 41 $u http://www.jstor.org/journals/00318205.html

2 - Related resource. Used to describe a link to a resource that is related in some way to the item described in the catalog record, such as a finding aid. Notice the use of the $3 subfield to provide additional information in this example:

856 42 $3 Finding aid $u http://lcweb2.loc.gov/ammem/ead/jackson.sgm

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[8] There is a long-term data integrity and display issue here, however. The Voyager OPAC displays the icon as a result of the presence of a URL in the 856 field of the bibliographic record. This approach generally works quite well, but it is peculiar to Voyager. In some systems (including DRA) icons are displayed on the basis of leader and fixed field data. For this and other display and retrieval reasons it is advisable for libraries to continue to code their online resources according to established standards. In particular, OCLC and CONSER recommend coding the 007 field for online resources whether a single- or a multiple-record policy is adopted.

*Subfields*

$3 – Type/relationship of resource. This subfield is used to provide information about the nature of the resource that you are linking to. Often it is used in conjunction with a second indicator blank, 1 or 2 to describe more exactly the relationship between the resource you are linking to and the one described in the record.

856 41 $3 Table of contents $u http://www.loc.gov/catdir/toc/fy02/2002281301.html

856 4_ $3 Bibliographic record display

$u http://www.netlibrary.com/urlapi.asp?action=summary&v=1&bookid=1373 $z An electronic book accessible through the World Wide Web; click for information

$u – URL. The URL is stored in this subfield. According to the MARC standard, it is also the subfield that is displayed by default in the absence of link text in subfield $y.

$x – Nonpublic note. This is a subfield for holdings notes that may be useful for staff purposes but are not intended for display in the OPAC.

$y – Link text. According to MARC, if a $y subfield is present then it should display in place of the URL in $u. In the following example users should see only the words "Click here to connect to JSTOR."

856 41 $u http://www.jstor.org/journals/00318205.html $y Click here to connect to JSTOR.

However, Voyager does not comply with this MARC display standard – see **856 display issues in Voyager** below.

$z – Public note. This is a subfield for holdings notes that are intended to display in the OPAC in addition to $3 and $u or $y. In the following example users should see *both* the URL *and* the message "For authorized users only."

856 41 $u http://www.jstor.org/journals/00318205.html $z For authorized users only.

But note once again that Voyager does not display this subfield exactly as MARC prescribes—see **856 display issues in Voyager** below.

A MFHD, like a bibliographic record, may contain more than one 856 field. If a library has more than one online version of a publication that it wishes to catalog on the same bibliographic record, it may place all the URLs in the bibliographic record, all the URLs in a single MFHD, or it may create a separate MFHD for each version. Subfield $u is also in theory repeatable within the same 856 field, but in practice multiple $u subfields are rarely seen in the same 856 field.

For detailed specifications of the MARC holdings fields see these sites:

http://www.loc.gov/marc/bibliographic/ecbdhold.html

http://www.loc.gov/marc/holdings/echdloca.html

## 856 Display Issues in Voyager

Voyager's web OPAC can display the contents of an 856 field as a hotlink taking the user to the address given in the $u subfield. However, Voyager allows less customization of this hotlink display than it does with its normal display of MARC fields.

Here is how Voyager displays the data in the 856 field:

The hotlink display can be placed anywhere in the bibliographic or holdings display. A display label, such as "Linked Resources" or "Related URL," is displayed with the contents of the 856 field. Specific subfields are displayed as follows:

> $u is displayed unless $3 or $z is present

> $3 will display in place of $u if present

> $z will display in place of $u if present

> $3 and $z will display together, if present, in a single line with no intervening punctuation

> $y does not display at all

The fact that Voyager does not comply strictly with MARC in displaying 856 data means that Voyager libraries will often code their data in a somewhat non-standard way to force the display that they want.

> Because Voyager does not display $y, Voyager libraries often use $z in place of $y for their intended link display text. So instead of

> 856 40 $u http://www.nytimes.com $y Click here to read the New York Times

> the field is coded

> 856 40 $u http://www.nytimes.com $z Click here to read the New York Times

> Because $z causes the display of $u to be suppressed, libraries that want to display the URL along with a public note or with $3 information usually copy the URL in $u to $z as well. So instead of

> 856 40 $u http://www.sciencedirect.com/science/journal/00396060 $z For authorized users only

> the field is coded

> 856 40 $u http://www.sciencedirect.com/science/journal/00396060 $z http://www.sciencedirect.com/science/journal/00396060 For authorized users only

In addition to 856, $u subfields are also defined for certain other fields, such as 520 (summary, abstract etc.) in bibliographic records. However, Voyager does not currently have the ability to display these other subfields as hotlinks.

Currently UC is configured to display $u as text only (i.e. without hotlinking it) because of the problem described at the beginning of this document. Most individual local catalogs are configured to display the hotlink as described above *plus* the $u as text. This is why URLs display twice in most local ILCSO OPACs when $u is the only subfield present.

As a rule of thumb, unless they want to display only the URL, libraries should decide what information or instructions they want to display with the hotlink and then put the relevant text in $z.

The question of what information or instructions to display with the hotlink is an important one which deserves to be considered carefully.

## Types of URLs

URLs in 856 fields commonly take one of four forms. URLs of types 1 and 2 will take any user to the site requested but the user will not necessarily be authorized to view it, even if her institution has a subscription. Typically URLs of types 3 and 4 will work for users affiliated with a particular institution, but not for anyone else. The upshot is that individual libraries have good reasons to

use URLs of types 3 and 4 in their catalogs, but under present arrangements these URLs are unsuitable for use in the UC.

1. Ordinary URLs pointing directly to the resource. E.g.:

http://www.sciencedirect.com/science/journal/00396060

2. Persistent URLs, or PURLs. PURLs point to an intermediate resolving service. The idea is that the real address is maintained by this service so that if the address changes the URL will not have to be updated in the catalog. E.g.:

http://purl.access.gpo.gov/GPO/LPS3970

which currently takes the user to http://lcweb2.loc.gov/frd/cs/

3. URLs with proxy strings. By incorporating a proxy address these URLs carry out an authentication procedure before taking the user to the site requested. In the following example the URL prompts an off-campus user to enter her personal institutional ID and password:

http://ezproxy.lib.monash.edu.au/login?url=http://www.sciencedirect.com/science/journal/00396060

4. URLs pointing to an intermediate local registry. In institutions which maintain a central registry of electronic resources where details of subscriptions, URLs, etc. are maintained, it is often simpler for maintenance and other purposes if the URLs in the catalog take the user to this registry rather than directly to the resource. E.g.:

http://www.library.uiuc.edu/ersearch/get.php?rid=3329

which takes a successfully authenticated user to http://pubs.acs.org/journals/chtedd/

Finally, link resolvers based on the OpenURL standard (SFX being an example) offer a new way to link both into and out from the library catalog with more flexibility and less maintenance than has been possible until now. However, discussion of the potential impact of OpenURL on linking in catalogs is beyond the scope of this document.

## Locations and Call Numbers

MFHDs associated with online resources are still given locations (and usually call numbers) because Voyager requires MFHDs to include an 852 field with at least a $b subfield. The choices that a library makes about the way it uses 856 fields may influence the locations and call numbers that it chooses to assign.

Most libraries create one or more electronic resources "locations" to be assigned to online resources. Creating such locations has the advantage of providing an easy way to offer a search limit for such resources. This may be more helpful than providing a Primary or Additional Format limit since it is not possible to combine these limits with a logical "or" in Voyager to create a single limit option, and MARC records with online content are not consistently coded as one or the other.

A further advantage of assigning clearly named locations for online resources is that they are easily identified if a Universal Borrowing request is promoted to a record with no print holdings.

Libraries vary in whether or not they assign a call number to online resources. If a true call number is not used, a generic call number such as "online resource" may be used. Some libraries, such as UIC, use a call number consisting of an instruction such as "click link above" (i.e. in the bibliographic record display). In a UC environment, where the link may not work for that library's patrons, or where (if the proposal is adopted to maintain URLs in MFHDs) there may be multiple links, that type of call number may no longer be suitable.

If a generic call number is used the holdings display configuration file can be modified so that call numbers coded as "other" (852 first indicator 8) are not hotlinked for a call number browse. Whether a particular library will want to make this modification depends on whether it has any other call numbers coded as "other" and whether the ability to click and browse these numbers is considered important.

## Data Loading Issues

It is sometimes possible to obtain sets of MARC records for collections of online resources. Examples are MARCIVE records for government documents and netLibrary records, as well as records from vendors such as SerialsSolutions for electronic journals. The records come complete with URLs and can be loaded in large sets into library catalogs.

The techniques and possibilities of bulk import deserve fuller treatment than they can receive here, but catalogers should at least be aware of some of the things that other Voyager customers have done using bulk import and some associated utilities in their local databases, and that might be applicable to the ILCSO environment. Libraries should contact the ILCSO Office if they have any questions about the usability of these options in the ILCSO environment.

> MFHDs and item records can be added during the bulk import process, with location and call number data taken from designated fields in the bibliographic record. This aspect of bulk import functionality is widely known, of course, and is currently in use by many ILCSO libraries.

> Bulk MARC editing tools like MARC Magician or LC's MARCmaker/MARCbreaker can be used to add or edit data in MARC records before they are loaded. An example of the uses to which this process can be put is the addition of proxy stems, link display text and notes to 856 fields.

> In a variation on this process, bibliographic records that are already in the database can be edited in bulk by the process of exporting the records, editing them outside Voyager, and then re-importing them using a *replace* profile. The relevant records can be identified using a Voyager report. Thus records already in the catalog can have proxy stems, link display text, notes, etc., added to them.

> Records may be *deleted* by bulk importing them using a special bulk import parameter. Although this process sounds counterintuitive at first, it is extremely useful in getting rid of large numbers of records that have been identified in some way, e.g. through a report. It also offers a way of refreshing record loads by deleting the previously loaded records before importing the new ones. [9] The process works for both bibliographic records and MFHDs; if both are present in the database then the import file will need to contain both as well. For deletion to proceed the incoming and the existing MFHDs must have the same location code.

> If a library chooses not to create item records for its online resources,[8] there is a Voyager utility called Prebulk which allows the library to create MFHDs associated with a set of bibliographic records and then import the bibliographic records and MFHDs together. One of the advantages of this approach is that it provides more flexibility in adding and formatting data in the MFHDs than is available when MFHDs are created through the bulk import process. For example, a standard generic call number can be created. Prebulk also offers

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[9] Note, however, that records cannot be deleted in bulk if they have item records or purchase orders attached to them. But since item records are not usually needed for online resources (which do not circulate in the normal sense of the word) and since MARC record sets for online resources are not usually used to create purchase orders, these limitations do not generally cause problems.

some bulk editing and validation features, e.g. the ability to strip selected fields from the MARC record before it is imported.

The IUAG CatER proposal involves adding 856 fields to MFHDs. Currently this cannot be done directly through bulk import. However, in the forthcoming 2001.2 release (tentatively scheduled to be implemented by ILCSO at around the end of the year) there will be a facility to create MFHDs with 85X/86X fields drawn from the bibliographic record. Thus it will be possible to take a netLibrary record, for example, and add it to Voyager with a MFHD containing the correct URL.

It should be noted that some of the bulk import functionality described here, including Prebulk, can be used only with the assistance of ILCSO staff.

Mention should be made of a set of programs created by Gary Strawn of Northwestern University for the purposes of mass editing of records including correction of URLs, performing authority work, updating GMDs, etc. They are collectively known as Batchcat, which is the name of the programming interface that is used to create them. Although very powerful and easy to use once installed, they do sometimes require a certain amount of systems expertise to install properly, and neither Endeavor nor ILCSO currently provides technical support for them. ILCSO has some security concerns about Batchcat but may consider providing support if those concerns can be overcome.