Appendix 5: History of Holdings Standards

A. NISO Holdings Standards

The perception of holdings as purely local delayed the rise of standards for decades. And yet in some aspects, such as that of a title as it comes from the publisher, the record of volumes and years is as universal as the bibliographic information. Contrast this situation with the decades of work on standards for every aspect of the bibliographic record, so that we have worked out the meaning of every bit of syntax and punctuation, and plentiful documentation exists for each part of the record and each code. Holdings standards did not arise until the 1980s, and they followed an era which depended on manual input of holdings in free style. There is still a lot of resistance to incorporating standards for something so “local” as holdings into our large bibliographic utilities such as OCLC. In fact, OCLC defined the MARC Format for Holdings fields as “local” fields and uses them only for local output, excluding them from the master record. Now that they have entered again, even though it has to be through embedding in other fields, there is definitely hope that more influential groups will be using the format, looking out for its improvement, and promoting its use nationwide.

The first standards were display standards: **Z39.42** and **Z39.44**. As explained in the session, this meant that they dealt with the content of a holdings statement and how it should be presented, whether manually, electronically, or some other way. The later Format dealt only with identifying the parts of the statement to communicate it electronically. So the first thing to stress is that even though the Format and NISO standards were developed in coordination, neither requires the other. The MARC Format for Holdings is capable of generating any display according to the programming provided by whatever software is in use in the library.

a. **Z39.42** (1980), Serial Holdings Statements at the Summary Level

ANSI Committee Z39 (Information Standards), Subcommittee 40, finished this standard and had it promulgated in 1980. There were “three levels of specificity” in this standard:

– Level 1: identified only *item* and *holding institution*

– Level 2: added *date of recording* and optional *notes on retention policy and completeness*, among other values

– Level 3: was the first to give *actual holdings*. The detail was similar in its roughness to the manual statements of the era (printed union lists, card files, paper, computer-output microfiche). Note the absence of captions such as volume and number; the open holding indicated by a hyphen, and the lack of supplements or indexes.

**Ex.** 1-3,5- 1975-1977,1979

Quick definition: A **summary statement** records the first and last parts of a range of units only, rather than listing all the units. A statement listing all the units would
be *itemized*, which is not provided for in this standard. It is important to realize that a volume is listed—as complete—if 50% or more of it is held. If less than 50% is held, the volume is omitted entirely. In other words, there is no detail whatsoever below the level of the volume, and even the volume level is up to fifty per cent approximation.

Though the standard is long superseded, data conforming to it is being loaded even today into online systems. This is why the 866-868, often used for retrospective holdings, allows the coder to specify this standard in the second indicator value.

**b. Z39.44 Serial Summary and Detailed Holdings**

This standard was called the NISO holdings display standard at the Summary and Detailed Level because the ANSI Subcommittee Z39 became the National Information Standards Organization, or NISO, around 1983, while this standard was being worked on by Subcommittee E. It started out to be a standard for detailed holdings, but as it became clear that the two levels would contradict each other, the decision was made to replace the earlier standard and add a new fourth level. At the same time this work was proceeding, another group outside NISO was working on the MARC Format for Holdings. Though there was some collaboration, the two groups did not really work together.

The standard looks different in that the numbering now includes captions (vol., no., tome, anno, etc.) Underlying differences are even greater, because now, a volume is listed if any part of it is held, rather than only if 50% or greater portion is held. There is now a fourth level, so this level 3 is the successor to the previous standard.

At Level 3, the summary level, options exist for displaying the data, one (Option B) that looked more like the previous standard:

**Level 3, Option B:**

\[ \text{v.1-v.5 (1980-1984)} \]

and one newer form (Option A) that—except for spacing/punctuation—looks more like the enumeration and chronology syntax in the bibliographic record (the 362 field).

**Level 3, Option A:**

\[ \text{v.1(1980)-v.5(1984)} \]

There is also a new fourth level of specificity, which guarantees the completeness and accuracy of the holdings statement to the issue level, for detailed holdings. Full detail at the issue level is now possible. The format at Level 4 is akin to that of Level 3, Option A, with *adjacent* presentation of enumeration and chronology.

**Level 4 (Detailed)**

\[ \begin{align*}
\end{align*} \]
When holdings are given in detail, some detail can be compressed. If complete, a compressed statement would look very much like a summary statement at Level 3. The difference is that at Level 4, the completeness of each unit given is guaranteed.

If there is a gap, it must be explicitly expressed in the holdings statement. Moreover, it is to be expressed “positively,” in terms of the units held, not units missing. At Level 4, the complete range between each gap is expressed as in this example, with the complete designation of each issue given before and after the gap:

\[
\]

Holdings with many gaps could end up looking very crowded. Some libraries tried to follow Level 4 holdings standards, except in simplifying the notation of multiple gaps (particularly within a single volume:

\[
\]

or simply \text{v.1:no.1-3,5-7,9-12(1995-1996)}

At Level 4, there were no options for display. Since open holdings were not allowed at this level, the statement also had to be constantly updated as issues were added. This was almost always done manually because so few systems had this capability.

During the creation of Z39.44, another unrelated group began working on the communication standard, the MARC Format for Holdings. Though there was some cross-checking, the two groups did not formally work together.

c. Z39.57 (Holdings Statements for Non-Serial Items (1989))

Belatedly, a monographic standard was added to the serials standard. Its conventions were mostly compatible with the serials standards that had preceded it. The monographic standard used some punctuation of its own which in the later standard has also been adopted for display of serial holdings.

The same year that this standard came out was the year the Holdings Format came out in its revised and expanded form, as the MARC Format for Holdings Data.

At this point, the library world began a debate whether it was better to continue two standards or to combine the standards into one. Certainly, the existence of only one Holdings Format was an influence, as was format integration on the bibliographic side. The International Standards Organisation (ISO) also had a single summary holdings standard for all formats.
Eventually, the subcommittee called Standards Committee AL was formed in 1995 and considered whether to revise Z39.44 or make an entirely new standard. They decided on the latter course.

d. Z39.71 (Holdings Statements for Bibliographic Items (1999))

The new standard was approved in March of 1999. It is “instantly” downloadable from NISO’s Web site, at www.niso.org. The latest arrangement on the NISO web site is that though hard copy costs $55, a downloaded PDF version is available for free!

Level 4:

\begin{verbatim}
\end{verbatim}

This standard is described in Session 1. The following are important features for serials:

– It handles all formats, so that serials and multiparts, for example, can be handled the same way.

– Some provisions and punctuation in earlier standards are made obsolete but may be retained in older holdings displays.

– The new standard was intended to be pragmatic, based on common sense, and minimally disruptive to current practice. It is also much more flexible than any of the earlier standards, with options for presentation even at the highest level. This makes it easier to customize for each library’s needs.

– This standard seems to recognize the trend that more and more libraries seem to be itemizing their serial holdings in OPAC displays, so it gives more examples and guidelines for this type of display. A holdings statement can also be partly itemized, partly compressed. A space or line break separates items within an itemized statement.

– Some of the distinctions in layout which made it easy to tell which standard and which level of the standard was being used are now optional or gone altogether. This may make it harder to distinguish, for example, between Level 3 and Level 4 holdings. MARC coding, if fully used and visible, can fill this information gap.

B. The MARC Format for Holdings

Impetus for a MARC format for holdings grew out of the desire of a regional group of libraries to share periodical holdings information, particularly of their scientific and technical periodical literature, in the early eighties. Eight southeastern research libraries, members of ASERL, agreed among themselves to design a software program to communicate periodical holdings information among their institutions. They obtained a
Title IIC grant in October 1981. A first edition of the documentation was produced in 1984. The software was produced, and the libraries contracted with SOLINET to put the program into production with a union catalog for the participants. The result was LAMBDA, which lasted for a few years in the mid-eighties, and attracted nationwide notice, though little emulation. Eventually, LAMBDA had to be abandoned as the capacity to maintain it was ending and none of the campuses could take it over. Some of the member library data that it held, however, was able to be transferred into MARC-based holdings in the OPACS of the home institutions.

Through arrangement with the Library of Congress, and continuing cooperation with the Z39 Committee and with MARBI, the group was eventually commissioned to develop their creation into a new MARC Format, covering both serial and non-serial items. The new work was initially called the *MARC Format for Holdings and Locations*, or MFHL (1986). It was revised and expanded as the *MARC Format for Holdings Data* (1989). The description of this Format is the subject of the bulk of this course, so we will not cover it here.

There were hindrances to the development and widespread use of the Format. One of those was the reluctance of the bibliographic utilities to adopt it. OCLC had its own pre-MFHL software underlying its Union List subsystem, and declined to change over to MARC—or even to adopt a newer or higher-level display standard. Programmers seemed to find the Format a hard nut to crack.

For the time being, its spread was very slow, with VTLS for several years the only national ILS producer who offered a fairly full implementation. As early adopters, they had legacy codes and data to contend with when the standard was later updated; with this standard, however, this did not happen too often! Some in-house models based on the early software were in use, as at the University of Kansas, but these developed apart from the check of the standard and adopted their own features. Gradually, in the nineties, MARC Holdings implementations, varying in completeness, were developed for, among others, NOTIS, DRA, SIRSI, Geac, Innovative Interfaces, Dynix, ExLibris, and Endeavor Voyager. Now interest began to mount in the field for the missing features which were such a widespread problem in most implementations.

In analogy with its sister formats, MFHD has in 1999 assumed the “MARC21” prefix to its name for the new millennium. With the turn of the year 2000, many new systems and many updated or completely rewritten systems are now being built or coming on the market, having had a fresh look at the standard. The hope of all those participating in the CONSER Publication Patterns and Holdings Task Force is that developmental difficulties in the Format, its implementation, and its documentation will be talked out among the experts and the users, so that we all can benefit from better products and a clearer idea of how to use them.
