# THE NEW IBERMARC FORMAT ALONGSIDE UNIMARC

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In the late nineteen sixties the General Directorate of Archives and Libraries of the Spanish Ministry of Culture decided to use computers to store the bibliographic records comprising the *Boletín de Bibliografía Española* (Spanish Bibliography Bulletin). A simple record model was designed to this end which proved satisfactory, given that the exchange of bibliographic information was at this time still being carried out by means of printed material.

Later, around 1975, work was begun on a project to develop a local MARC version, adapted to Spanish cataloguing practices. The result (the first version of the IBERMARC format) was structured according to ISO 2709 standard and included the specifications necessary for monograph descriptions. In 1976, this new record model was first applied to the *Bibliografía Española* ('Spanish Bibliography').[1]

A revised version of IBERMARC for monographs appeared in 1983, and was the first publication to be presented 'officially', in the form of a manual, by the Spanish Ministry of

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[1] Cuesta Escudero, M.J. «Formatos bibliográficos: el IBERMARC», *Boletín de la Anaba*, XXVI,3-4, 1976, pp. 26-34.

Culture.[2] The format was used in library automation software, in particular SABINA (Sistema de Automatización de la BIblioteca NAcional = National Library Automation System).

1988 saw the publication of the first version of the IBERMARC format for serials[3]. In the meantime, the need to maintain and update the IBERMARC monograph manual had led to the introduction of various modifications throughout the nineteen eighties. A new version of the monographs format[4] was published also in 1988; both appearing under the auspices of the Spanish Ministry of Culture.

In 1990 several new versions of bibliographic IBERMARC formats appeared, having been developed by the Biblioteca Nacional (Spanish National Library): Old and Recent Monographs; Video; Sound Recordings; Cartographic Materials; Authorities and Holdings. Although they are yet to be published officially, it seems that it may at last be possible to talk of an IBERMARC which is complete and internationally valid, and the product now has the blessing of the national bibliographic agency. (Previous versions had been developed at the insistence of the Spanish Ministry of Culture, but without the public guarantee of the National Library.) The National Library is currently producing its new records —approximately 100,000 at the beginning of 1991— using these new versions of the format along with the new ILIADA (Integrated LIbrary in ADAbas) library automation software. The conversion of the remaining records in the Spanish Bibliography, which relate to the period 1979-87, is also in progress, since these records were originally made with now-obsolete versions of IBERMARC. The number of new specifications and records is now sufficiently

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2Munarriz, M.T. el al. *Formato IBERMARC para monografías: Manual*. Madrid: Ministerio de Cultura, 1983.

3*Formato IBERMARC para publicaciones seriadas*. Madrid: Ministerio de Cultura, 1988.

4*Manual del formato IBERMARC para monografías*. Madrid: Ministerio de Cultura, 1988.

large to suggest that the Spanish records should be converted to the international UNIMARC format, and vice versa.

In April 1991, an agreement was reached between the Spanish National Library and the University of Granada, devising a joint project to research the formats used to perform the transfer of bibliographic information recorded in machine-readable form. The research is being led by a joint committee composed of members of the National Library staff and a working group from Granada University's School of Library and Information Science. The main aim of the project is to develop software capable of converting IBERMARC bibliographic descriptions to the UNIMARC format, and vice versa. This task is currently being undertaken by four members of staff at the Granada School (acting under the supervision of the National Library representatives) who are using the information provided by the Spanish National Library and technical resources of the Library School. Once the task has been completed, the National Library will publish a summary of the main results.

We will now look in some detail at certain problems to be faced when attempting to convert IBERMARC to UNIMARC, and vice versa. Although some of these observations have been previously published by the authors[5], this article includes significant modifications which are necessary in order to update the information.

With regard to the level of compatibility of our national format, it should first be understood that UNIMARC is a 'superset' of IBERMARC, since IBERMARC records can be converted to UNIMARC without information loss. The reverse process, however, is difficult to achieve without some loss of data.

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[5]Moya, F. and Hípola, P. "IBERMAC/UNIMARC". *Boletín de la Asociación Andaluza de Bibliotecarios*, octubre-diciembre 1987, 9, pp. 11-14.

In their general record structure, both models follow the ISO 2709 standard. Thus, the conversion of records to either format will not substantially affect the leader, directory or record identifier (field 001). Nevertheless, with regard to the rest of the tagged fields, identifiers and indicators, there are important differences between UNIMARC and IBERMARC, which can be summed up as follows:

a) different general distribution of functional blocks;

b) variations in the distribution of certain fields within each block;

c) different indicators assigned to certain fields;

d) different distribution of certain subfields, and also, sometimes, different identifiers).

*Fig. 1* shows a graphic representation of the general correspondence between the functional blocks of the two formats. As is well known, the structure of UNIMARC is somewhat different from that of many of the national MARC versions developed in the nineteen seventies; hence the difference when comparing UNIMARC with IBERMARC. UNIMARC is intended to be a 'universal' model, not only in the general sense, but also in the documentary sense – offering a framework that allows the inclusion of descriptions of any type of document.

When we consider the distribution of fields of the two formats, the great differences in the fields of the IBERMARC block 'Identification and Coded Information' are striking. Block 0XX of our national format, inspired by USMARC, is notable for the extreme formalization of its contents. Most of the coded information is grouped there, although it may not necessarily be particularly interrelated: ISBN, Deposit Number, classifications,

language codes, etcetera.

Sometimes –with field 021, for example– the IBERMARC field tag coincides with that of UNIMARC. However, this is not always the case. Should the indicators, identifiers and subfield distribution coincide, the conversion software need only change the tag. When little or no correspondence exists, more changes will be necessary. For example:

**IBERMARC field 245**

| | |
|---|---|
| Indicators: | 13 [1] |
| Identifier: | $a [2] |
| First subfield: | La Celestina |
| Identifier | $b [3] |
| Second subfield: | Tragicomedia de Calixto y Melibea |
| Identifier: | $c [4] |
| Third subfield: | Por Fernando de Rojas |

**UNIMARC field 200**

| | |
|---|---|
| Indicators: | 1b [5] |
| Identifier: | $a [6] |
| First subfield: La Celestina |
| Identifier: | $e [7] |
| Second subfield: | Tragicomedia de Calixto y Melibea |
| Identifier: | $f [8] |
| Third subfield: | Por Fernando de Rojas |

Key:  (1) 1 = title added entry, 3 = three non-filing characters
(2) title proper
(3) subsequent statement of responsibility or parallel title proper (in this case it is subsequent statement)
(4) remainder of title page (statement of responsibility)
(5) 1 = title is significant (access point)
(6) title proper
(7) other title information
(8) first statement of responsibility.

As one can see, the second indicator has to be suppressed when converting

IBERMARC to UNIMARC. With the reverse process it is difficult to generate such an indicator,

unless certain routines are used involving a complex system of stop-words.

For UNIMARC field 200 the identifier $d (parallel title proper) and $g (subsequent statement of responsibility) *may* also be used. UNIMARC $d converts to IBERMARC $b. So, upon conversion, the contents of UNIMARC subfields $d and $e *must* be combined in a single IBERMARC subfield. Something similar occurs with UNIMARC $f and $g, which *must be* merged into IBERMARC $c.

The conversion of the contents of IBERMARC field 245 to UNIMARC field 200 is, however, by no *means* a straightforward operation, since the way in which data is presented in the Spanish format *makes* it impossible to know automatically which function is carried out by the information contained in subfields $b and $c. Of course, several solutions can be found, such as the use of a colon (:) in an IBERMARC record to indicate that the second subfield contains a subsequent statement of responsibility, and an equals sign (=) to denote a parallel title. The conversion software could thus use these characters to distribute the information among the corresponding subfields. Yet, in the example just quoted, where are these signs to be placed? At the end of the first subfield? At the beginning of the second? Were every library to adopt its own conventions, would we not rather unfortunately find ourselves flying in the face of all progress towards standardisation?

The detailed information now available regarding ISBD punctuation needs to be built into the records, in *much the same* way as it is included in the *Unimarc Handbook*.[6] We suggest that the Spanish National Library ought to produce detailed guidelines for cases such as this, which would be generally applicable – at least until the definitive version of

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6Hopkinson, A (ed.). *Unimarc Handbook*. London: IFLA International Office for UBC, 1983.

the IBERMARC format is published.

# Figure 1

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┌─────────────┐                    ┌─────────────┐
│║ IBERMARC ║  │                   │ ║ UNIMARC ║  │
└─────────────┘                    └─────────────┘


                              ┌─────────────────────┐
                              │   IDENTIFICATION     │ 0XX
                              └─────────────────────┘
        ┌────────────────────┐│ CODED INFORMATION     │ 1XX
0XX │ IDENTIF. & CODED INF. ├┤├─────────────────────┤
        └────────────────────┘│ SUBJECT ANALYSIS      │ 6XX
                              ├─────────────────────┤ (660-680)
                              │   INTERNATIONAL USE   │ 8XX
                              └─────────────────────┘


┌────────────────┐        ┌──────────────────────────────┐
1XX │ MAIN ENTRY │        ├┤ INTELLECTUAL RESPONS. │ 7XX
└────────────────┘        └──────────────────────────────┘
                                   (700,710,720)


┌───────────────────────────┐     ┌─────────────────────────┐
2XX │ TITLE, EDITION, IMPR. │     │ DESCRIPTIVE INFORMAT. │ 2XX
├───────────────────────────┤     ├─────────────────────────┤
3XX │ PHYSIC. DESC. & PRICE ├──   │ RELATED TITLE         │ 5XX
├───────────────────────────┤     └─────────────────────────┘
4XX │ SERIES STATEMENT      │
└───────────────────────────┘


┌────────────────┐        ┌──────────────────────────┐
5XX │ NOTES      │        ├┤ NOTES                   │ 3XX
└────────────────┘        └──────────────────────────┘


┌──────────────────────────┐   ┌──────────────────────────┐
6XX │ SUBJECT ADDED ENTRY  ├──┤ SUBJECT ANALYSIS        │ 6XX
└──────────────────────────┘   └──────────────────────────┘
                                    (600-607)


┌──────────────────────────┐   ┌──────────────────────────┐
7XX │ ADDED ENTRIES        ├──┤ INTELLECTUAL RESPONS. │ 7XX
└──────────────────────────┘   └──────────────────────────┘
                                    (700-722)


┌──────────────────────────┐   ┌──────────────────────────┐
8XX │ SERIES ADDED ENTRIES ├──┤ LINKING ENTRY           │ 4XX
└──────────────────────────┘   └──────────────────────────┘
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