## ANSWERS TO QUESTI ONNAIRE "APPENDIX A" OF THE GOOGLE BOOK <br> SEARCH TECHNICAL SPECI FICATI ONS FOR LIBRARY PARTNERS (REVISION 4.0)

1. Number of barcode systems in use at the library. If your Library uses more than one barcode format, please explain how many different formats are used, and for which collections:

We use just one barcode system
2. A full specification of the barcode format:
a. Barcode symbology

CODE 39
b. Barcode alphanumeric lenght (in digits)

10
c. Barcode fields
(i) Digit positions reserved for Library prefix field

2 digits (48, 49 or 53)
(ii) Digit positions reserved for book identifier field

7 digits
(iii) Digit positions reserved for check digit field

1 digit
(iv) A description of any field not mentioned above
d. A check digit computation method, if not outline above:

MOD 11
Position weighting: $(0,7,8,4,6,3,5,2,1)$
Algorithm
Sum =0
FOR i=1 to 9
Sum $=$ sum + barcode[ $i]^{*}$ weight $[i]$
NEXT
number $=11$ - (sum MOD 11)
IF number<10 THEN
Check _digit = number
ELSEIF number $=10$ Then
Check _digit = "X" ELSE

Check_digit $=0$
END IF
e. 10 example barcodes, with fields decoded in the manner outlined above:
(i) (ii) (iii)
|53|2128662|0
|53|2128663|X
|53|2128664|9
|53|2128665|8
|53|2128666|7
(i) (ii) (iii)
$|53| 2128667 \mid 6$
$|53| 2128668 \mid 5$
$|53| 2128669 \mid 4$
$|53| 2128670 \mid 0$
$|53| 2128671 \mid X$
$|48| 0032001 \mid 7$
$|48| 0031995 \mid 9$
$|48| 0032002 \mid 6$
$|49| 0052287 \mid 0$
$|49| 0083225 \mid 4$
$|49| 0098021 \mid 8$
3. Information on barcode uniqueness... For each format, we would expect:
a. 1 barcode per book, or a robust algorithm... Please describe how many barcodes we should expect fo find on a volume, and what should be done in the case of multiple barcodes on a single volume.

Almost always every volume has a unique barcode. But a few might have more than one. The volume has got more than one barcode but its record has only one.

This is always due to an error and you should select from the metadata the barcode that matches the one on the volume. Anyway this is extremely unusual.
b. Likelihood of collisions (two books sharing the same barcode...)

Not such possibility
c. Protocol for barcoding serials and multi-volume sets.

Every volume has got its own barcode.
One volume can be formed either by a single issue of a serial (or a book of a multi-volume set) or by a set of of issues or books bound together, aka. "factitious collection".

The item record which refers to each volume contains in the "volume" field (MARCXML 955 subf. "v") the identification (number etc.) of the serial issue, volume or factitious collection.
d. Other barcoding protocols not explicitly mentioned above.

No other protocols.
e. Description of method(s) used to avoid barcode collisions...

We use a local Microsoft Access application to generate barcode numbers. This software tool has a log with all the information about the generated barcode numbers (date, first and last numbers and what were the numbers used for)
In order to generate new barcode numbers the application will ask you for the first and last number, and for how many numbers you would like
to get. This software ensures that the first number is next to the last one you generated last time. Also it checks that if you subtract the last number and the first number the result is equal to the total amount of numbers you asked for.

We print barcode labels with this supplier:
FormSystem Servicios de Comunicación Gráfica
Vía de los poblados 17, 4plta. P14
28033 Madrid (Spain)
(34) 913825028
www.formsystem.net
When we receive the labels we check by hand that the results we get are all ok.

On the other hand, until summer 2000 we used the software "Libertas" for library management, which validated both barcode creation and input in the catalog. So the collisions were not at all possible. The current software, Millennium, warns about collisions on the input (cataloging).
4. What barcode links to the bibliographic or item record?

- If multiple barcodes in a volume link to the same record, does the record list all barcodes?

Not such possibility: there is only one barcode stuck on each volume

- If not, which barcode is listed in the bibliographic record?

5. Which field(s) contain the barcode(s) in the MARC record, and in which form...?

In our system the barcode does not belong to the bibliographic record but to an "item" record which links to the bibliographic record. The fields of the item record are non-MARC. There is a field in the item record called BARCODE (COD. BARRAS in Spanish) also known as field group "b".
6. How/where is other item-level information placed in the MARC record...

The rest of the item-level information is also placed within the item record in non-MARC fields.
7. Information on barcode coverage:
a. How many books are currently barcoded?

- Total data: 2,294.452
- Pre-1866 data: 70,643 (just books)
b. What are plans (if any) for barcoding...?
- We are planning to barcode the serials for this year.
- We are cataloging and barcoding books pre-1866. We would like to finish the 19th century this year and to go further, firmly in the cataloging of the Biblioteca Histórica books.


## 8. Associated reading/scanning tools:

a. What tools do you use to read or scan barcotes (wands, etc)? Please provide the manufacturer and model of your most commonly used tools

We have quite a few different devices. The reason for this is that every faculty library manages their own devices. We recommend the one we have tested with satisfactory results: Serie 9500 Voyager by Metrologic.
b. Have you had significant difficulty reading your barcodes with the tools mentioned above? If so, please comment on the problem frecuency.

Although we have a lot of different reading/scanning tools we have never had any problem
9. Please provide any other information about your barcoding procedure that you think may be of interest to Google.
a. It's a good thing to stress three special concerns about the way barcodes "match" titles:

- Factitious collections
- Component parts cataloging
- Set of works published together.
- Factitious collections: The volume has got a single barcode but its "item" record links to several bibliographic records which describe any book bound together. This case causes a set of bibliographic metadata records which share the same barcode in the item-level information.
- Component parts cataloging: The volume has got a single barcode but its "item" record links to several bibliographic records. One of the bibliographic records refers to the whole book and the rest of bibliographic records refer to component parts.
- Publication of a set of works -titles- together in a single volume (which may have either a common title, such as "Selected works...", or not): the book is cataloged in a single bibliographic record, so metadata may include several titles, authors, and so on, linked to a single barcode. That happens very often in the case of publication of "complete" or "selected" works of an author, period, genre, etc.
b. Sometimes we have to print some labels. In this case we use the configuration we show next:

1. label paper: APLI Ref. 012826.800 u/pcs. 48,5x16,9 mm.
2. software tool: Key Label Designer 1.02
3. label configuration:

| Nombre del Formato: | BUC | centímetros |  |
| :---: | :---: | :---: | :---: |
|  | - Láser Dimensiones de la Página |  |  |  |
|  |  |  |  |  |
| Ancho 20,998 |  | Longitud 29,692 |  |
| Margen Izquierdo 1.07 | Margen Derecho |  | 0,424 |
| Margen Superior 0, | 0,398 Ma | Margen Inferior | 0,398 |
| Dimensiones de la Etiqueta |  |  |  |
| Ancho 4,848 | 848 Alto | 1,689 | radas |
| $\bigcirc$ Esquinas Redondeadas |  | squinas Cuad |  |
| [ Formato de la Página |  |  |  |
| \# A través 4 | \# Abajo 17 |  |  |
| $\Gamma$ Separación Automátic | Hor 0,000 | Ver 0,000 |  |
|  | Aceptar | Cancelar | Ayuda |

