

US MARC 21 社區資訊機讀格式

US MARC 21 COMMUNITY INFORMATION FORMAT

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【摘要 Abstract】

MARC 21 社區資訊機讀格式是針對處理社會中多樣的非書目性資源而設計的格式，雖然始於 1980 年代初期，至今仍甚少為圖書館界重視而予以運用。本文目的在介紹社區資訊格式之設計理念、特質、應用、問題及實例，強調其重要性並呼籲圖書館界重視利用。

The US MARC 21 Community Information Format is a format for description of nonbibliographic resources that fulfills the information needs of a community. The Community Information Format allows libraries to include individuals (people), organizations, programs or services, events, and other resources that can help library users gain information they need, enrich their lives, solve problems and enhances their enjoyment of life. Although this format was initiated in the early 80's, first published in 1993, and it was recently included in MARC 21 family of formats, but it is the least used format. This paper attempts to introduce the US MARC 21 Community Information Format, its design concept, characteristics, applications, problems and examples. Finally, the author of this paper solicits the library community the importance of using of this format to handle nonbibliographic resources.

關鍵詞 Keyword

美國機讀格式 美國社區資訊機讀格式 社區資訊

US MARC 21 Format ; US MARC Community Information Format ; Community Information



壹、前言

1999 年，美國國會圖書館和加拿大國家圖書館聯合對外公告將 US MARC 和 CAN MARC 兩格式合而為單一格式，並命名為 MARC 21，以達到未來廿一世紀和全世界使用之目的。MARC 21 格式涵蓋五種格式，是一個機讀格式家族模式 (Family of formats)，其中有書目 (Bibliographic)、權威 (Authority)、館藏 (Holdings)、分類 (Classification) 和社區資訊 (Community Information) 五種格式。同時加拿大亦出版法文版的 MARC 21。(註 1) 本文旨在介紹鮮為圖書館界認識而又少被應用的 US 21 MARC 社區資訊機讀格式 (US MARC Community Information Format，簡稱 CIF)。MARC 社區資訊格式重要的特色是專為描述社區需要的非書目性資源 (Nonbibliographic resources) 而設計的機讀格式。這些非書目性資源，如計畫 / 節目 (Programs)、服務 (Services)、組織 / 機構 (Organizations)、個人 (Individuals)、事件 (Events) 或其他對社區有用的資源 (Other resources)，其目的是對社會中各方面多樣又不同的需求皆可以提供資訊服務。(註 2) 1980 年代初期，由於社區資訊多為非書目性的，更具有動態的、活潑的而又不斷發展的特性，其資料單元 (Data elements) 無法放入標準機讀格式中，另外又因

無編目規則可循，美國圖書館界之解決方法當時則是另外為社區資訊設計格式，或修改已有的 MARC 格式以容納社區資訊的資料單元。(註 3)

1985 年至 1993 年間是社區資訊格式發展時期，其間經過美國公共圖書館協會技術委員會和已自行開發以機讀形式輸入館內的自動化系統之圖書館共同擬定「社區資訊標準化資料單」(詳見下表一)，該委員會於 1989 年向美國國會圖書館網路發展 (The Network Development and MARC Standards Office, the Library of Congress) 和 MARC 顧問小組 (US MARC Advising Group) 提出要求，要求由國會圖書館為社區資訊設計機讀格式。美國國會圖書館於 1992 年 4 月核准 US MARC Community Information Format 為暫時性的格式，期許透過圖書館的使用，得到經驗而再予以修改。(註 4) 最後，美國社區資訊機讀格式終於 1993 年正式出版，是一個較新的而最少被使用的機讀格式，為溶入 MARC 家族之一員，故其格式內容設計類似和 / 或仿用書目性格式 (bibliographic) 所用之欄位和編碼，其設計理念與書目性格式相同，也可用於公共目錄中。(註 5) MARC 21 Community Information Format 之 Field list 項目詳見表二。(註 6)



表一：美國 MARC 社區資訊格式採用之標準資料單元項目表(1992 年)
(Standardized list of data elements for community information)

Accessibility	Licensing/Accreditation
Additional Address Locations	Meeting Room/Facilities/Equipment
Affiliation (membership; parent organization)	Meeting Times
Annual Budget	Mission Statement/Purpose
Application for Service (required documents)	Mutual Support Groups
Cataloging Record Source	Name of Public Contact Person
Child Care	Officer Names/Advisory Board Members/Peer Advisory Group
Classification Number	Primary Address
Control Number	Program Description/Description of Services Programs (titles)
Date of Record (original entry date/date record updated)	Publication Titles
Director's/Administrator's Name	Size of Staff
Eligibility Requirements	Speakers Bureau
Fee	State
Former Name(s)/Acronym(s)	Subject Headings
Funding Source	Target Group
Geographic Area/Location Served (in text and in coded form)	Telephone Number--including TTD, FAX, 800 number; electronic mail address
Handicapped Accessibility	Title of Organization (program name/popular name)
Hours of Operation	Volunteer Opportunities
Human Service Number	Waiting List
Languages in which Services are Provided (in text and in coded form)	Year Established/Founding Date
Languages Spoken by Staff (in text and in coded form)	Zip Code

表二：MARC 21 Format for Community Information: Field List
2000 English Edition
Update No. 1 (October 2000)

Leader and Directory

見表三

Control Fields (001-008)

- 001 - CONTROL NUMBER (NR)
- 003 - CONTROL NUMBER IDENTIFIER (NR)
- 004 - CODED DATES FIXED FIELD (NR) [OBSOLETE]



005 - DATE AND TIME OF LATEST TRANSACTION (NR)

007 - PHYSICAL DESCRIPTION FIXED FIELD (NR)

008 - FIXED-LENGTH DATA ELEMENTS (NR)

Number and Code Fields (01X-08X)

010 - LIBRARY OF CONGRESS CONTROL NUMBER (NR)

016 - NATIONAL BIBLIOGRAPHIC AGENCY CONTROL NUMBER (R)

035 - SYSTEM CONTROL NUMBER (R)

040 - RECORD SOURCE (NR)

041 - LANGUAGE CODE (NR)

043 - GEOGRAPHIC AREA CODE (NR)

046 - SPECIAL CODED DATES (NR)

050 - LIBRARY OF CONGRESS CLASSIFICATION NUMBER (R)

052 - GEOGRAPHIC CLASSIFICATION (R)

058 - OTHER GEOGRAPHIC CLASSIFICATION CODE (R) [DELETED]

060 - NATIONAL LIBRARY OF MEDICINE CLASSIFICATION NUMBER (R)

066 - CHARACTER SETS PRESENT (NR)

070 - NATIONAL AGRICULTURAL LIBRARY CLASSIFICATION NUMBER (R)

072 - HUMAN SERVICES CODE (R)

073 - TYPE OF PROGRAM OR ORGANIZATION CODE (R)

080 - UNIVERSAL DECIMAL CLASSIFICATION NUMBER (NR)

082 - DEWEY DECIMAL CLASSIFICATION NUMBER (R)

084 - OTHER CLASSIFICATION NUMBER (R)

Primary Name Fields (1XX)

100 - PRIMARY NAME--PERSONAL (NR)

110 - PRIMARY NAME--CORPORATE (NR)

111 - PRIMARY NAME--MEETING (NR)

Title and Address Fields (2XX)

245 - TITLE (NR)

246 - VARYING FORM OF TITLE (R)

247 - FORMER TITLE (R)

270 - ADDRESS (R)

271 - ADDITIONAL ADDRESSES (R) [DELETED]

275 - ADDRESS ASSOCIATED WITH TITLE (R) [DELETED]

Physical Description, Hours, Etc. Fields (3XX)

301 - HOURS, ETC. (R) [DELETED]

303 - SUBORDINATE ENTITIES (R)

307 - HOURS, ETC. (R)



311 - MEETING ROOMS AND FACILITIES AVAILABLE (R)

312 - EQUIPMENT AVAILABLE (R)

Series Statement Fields (4XX)

440 - SERIES TITLE (R)

Note Fields (5XX)

500 - GENERAL NOTE (R)

501 - CURRENCY OF INFORMATION NOTE (R)

505 - PROGRAMS NOTE (R)

511 - PARTICIPANT OR PERFORMER NOTE (R)

520 - DESCRIPTION NOTE (R)

521 - TARGET GROUP NOTE (R)

522 - GEOGRAPHIC COVERAGE NOTE (NR)

531 - ELIGIBILITY, FEES, PROCEDURES NOTE (R)

536 - FUNDING SOURCE NOTE (R)

545 - BIOGRAPHICAL OR HISTORICAL NOTE (R)

546 - LANGUAGE NOTE (R)

551 - BUDGET NOTE (R)

570 - PERSONNEL NOTE (R)

571 - VOLUNTEERS NOTE (R)

572 - AFFILIATION AND OTHER RELATIONSHIPS NOTE (R)

573 - CREDENTIALS NOTE (R)

574 - TRANSPORTATION AND DIRECTIONS NOTE (R)

575 - ACCOMMODATIONS FOR THE DISABLED NOTE (R)

576 - SERVICES AVAILABLE NOTE (R)

581 - PUBLICATIONS NOTE (R)

587 - OTHER INFORMATION AVAILABLE NOTE (R)

Subject Access Fields (6XX)

600 - SUBJECT ADDED ENTRY--PERSONAL NAME (R)

610 - SUBJECT ADDED ENTRY--CORPORATE NAME (R)

611 - SUBJECT ADDED ENTRY--MEETING NAME (R)

630 - SUBJECT ADDED ENTRY--PUBLICATION TITLE (R)

650 - SUBJECT ADDED ENTRY--TOPICAL TERM (R)

651 - SUBJECT ADDED ENTRY--GEOGRAPHIC NAME (R)

653 - INDEX TERM--UNCONTROLLED (R)

654 - SUBJECT ADDED ENTRY--FACETED TOPICAL TERMS (R)

656 - INDEX TERM--OCCUPATION (R)

657 - INDEX TERM--FUNCTION (R)

658 - INDEX TERM--CURRICULUM OBJECTIVE (R)



Added Entry Fields (7XX)

- 700 - ADDED ENTRY--PERSONAL NAME (R)
- 710 - ADDED ENTRY--CORPORATE NAME (R)
- 711 - ADDED ENTRY--MEETING NAME (R)
- 720 - ADDED ENTRY--UNCONTROLLED NAME (R)
- 730 - ADDED ENTRY--PUBLICATION TITLE (R)
- 740 - ADDED ENTRY--SPECIFIC PROGRAM TITLE (R)

Location and Alternate Graphics Fields (8XX)

- 856 - ELECTRONIC LOCATION AND ACCESS (R)
- 880 - ALTERNATE GRAPHIC REPRESENTATION (R)

首先比較 US MARC 社區資訊格式與書目格式不同之處，詳見下表三：(註 7)

表三：美國 MARC 社區資訊格式與書目格式欄位之比較

(一) 記錄標示 (Leader)

US MARC Community Information Field		US MARC Bibliographic Field	
00-04	Logical record length	00-04	Logical record length
05	Record status	05	Record status
	c Corrected or revised		c Corrected or revised
	f Deleted		d Deleted
	n New		n New
			a Increase in encoding level
			p Increase in encoding level from prepublication
06	Type of record	06	Type of record
	q Community information		(codes a-g, i-k, m, o, r)
07	Kind of data	07	Bibliographic data
	n Individual		(codes a-d, m, s)
	o Organization		
	p Program or service		
	q Event		
	z Other community information data		
08-16	(same as for the bibliographic format)		
17-19	Undefined	17	Encoding level
		18	Descriptive cataloging form
		19	Linked record requirement
20-23	(same as for the bibliographic format)		



(二)段(Blocks)

US MARC Community Information Field		US MARC Bibliographic Field	
0XX	Control Information, Numbers, and Codes	0XX	Control Information, Numbers, and Codes
1XX	Primary Name	1XX	Main Entry
2XX	Titles, Addresses	2XX	Titles and Title Paragraph
3XX	Physical Information, Etc.	3XX	Physical Description, Etc.
4XX	Series Information	4XX	Series Statements
5XX	Notes	5XX	Notes
6XX	Subject Access Fields	6XX	Subject Access Fields
7XX	Added Entries Other than Subject	7XX	Names, Etc. Added Entries or Series; Linking Fields
8XX	Miscellaneous	8XX	Series Added Entries; Holdings and Locations
9XX	Reserved for Local Implementation	9XX	Reserved for Local Implementation

US MARC 社區資訊記錄之有別於其他 US MARC 記錄是在格式中記錄標示(Leader)/06(記錄種類)位置上是以“q”代碼標示其為社區資訊記錄，同時在 Leader/07(資料種類)位置以下列代碼標識之：(註 8)

- n (Individual)：代表”個人”方面之資訊；
- o (Organization)：代表”組織/機構”相關之資訊；
- p (Program or service)：代表某計畫或服務項目的資訊；
- q (Event)：表示某事件之相關資訊；
- z (Others)：表示除以上資源種類外，與社區相關之其他資源。

以下介紹 MARC 社區資訊格式記錄實例：(註 9)



(一) 機構

COMMUNITY INFORMATION RECORD: AGENCY

This example can be identified as a record for an organization (including agencies) by code o in Leader/07. The record contains fields 110 (Primary Name-Corporate) and 270 (Address), two fields used with organizations.

Leader/06 q [community information]

Leader/07 o [organization]

- 001** < control number >
- 003** < control number identifier >
- 005** < date and time of latest transaction >
- 008** 930917aaaaaeng
- 040** ##\$a< MARC code > \$c< MARC code >
- 041** 0#\$aengspa
- 110** 2#\$aHaven House.
- 270** 1#\$aP.O. Box 50007 \$bPasadena \$cCA \$e91115 \$j213-681-2626 (24 hour hotline)
- 307** ##\$a24 hours a day, 7days a week.
- 520** ##\$aA residential shelter for women and their children who have been abused by alcoholic partners.
- 531** ##\$aWomen (18-64) with their children (0-18) who need shelter from physical and emotional abuse due to alcohol in family member; \$bfrom \$1.50/day (Residential) to \$20.00/month (Group CNSL); \$ctelephone; no walk-ins.
- 546** ##\$aEnglish, Spanish.
- 574** ##\$aPublic transportation. Call RTD: 818-246-2593.
- 650** #0\$aBattered women.
- 650** #0\$aWomen's services.



(二)計畫/節目

COMMUNITY INFORMATION RECORD: PROGRAM

The example can be identified as a record for a program or service by code p in leader/07. The record contains field 245 (Title), a field used with events and programs. A field 004 (Coded Dates Fixed Field) is also present.

Leader/06 q [community information]

Leader/07 p [program or service]

001 < control number >

003 < control number identifier >

005 < date and time of latest transaction >

008 921229aaaaa |||

040 ##\$a< MARC code > \$c< MARC code >

046 ##\$f19931226 \$g19931221 \$h19931115 \$i19931220

110 2#\$aUnited States Marine Corps.

245 #0\$aToys for Tots.

270 1#\$aP.O. Box 223 \$bBroken Arrow \$cOK \$e74012 \$pSgt. Kathy Hibner

307 8#\$aBegins November 15, 1993.

500 ##\$aAnnual toy drive.

500 ##\$aCollection locations include: All fire stations in Tulsa, Broken Arrow; Tulsa National Bank, 71st and Yorktown; All Wendy's restaurants; Eastland Mall; All three American Shopping Channel Stores; Riverside Chevrolet; West Star Bank on Garnett; Scissors Hair and Body; Dresser Rand; Kindercare; Capelli's Hair Salon; All U-Haul locations and Bargain Time in Sand Springs.

501 8#\$aUpdated 6/93.

572 ##\$aSponsored by the United States Marine Corps.

650 #0\$aChristmas.



(三) 組織

COMMUNITY INFORMATION RECORD: ORGANIZATION

This example can be identified as a record for an organized by code o in leader/07. The record contains field 110 (Primary Name-Corporate) and 270 (Address), two field used with organizations.

- Leader/06** q [community information]
Leader/07 o [organization]
- 001** < control number >
003 < control number identifier >
005 < date and time of latest transaction >
008 930608aaaaaeng
040 ##\$a< MARC code > \$c< MARC code >
046 ##\$f199311uu
110 2#\$aWasatch Front Road Runners.
270 1#\$aP.O. Box 8344 \$bSalt Lake City \$cUT \$e84108 \$k467-4203 \$pRichard Barnum-Reece
308 ##\$aM-F, 8-5.
501 ##\$aSERVICES: Runners organization.
502 8#\$aDate revised: 9/93.
531 ##\$bFees for membership/newsletter.
581 8#\$aPublishes the newsletter The Utah Runner and Cyclist.
587 ##\$aSPORTS ORGANIZATIONS: CIF pamphlet file.
650 #0\$aRunning.
650 #0\$aJogging.
730 0#\$aUtah Runner and Cyclist.



(四) 事件

COMMUNITY INFORMATION RECORD: EVENT

This example can be identified as a record for an event by code q in leader/07. The record contains field 245 (Title), a field used with events and programs.

Leader/06 q [community information]
Leader/07 q [event]
001 < control number >
003 < control number identifier >
005 < date and time of latest transaction >
008 930816anannng
040 ##\$a< MARC code > \$c< MARC code >
046 ##\$g19931002 \$h19931001 \$i19931001
245 #0\$aContemporary Music and Inter-disciplinary Music Theatre.
270 1#\$aRadcliffe Dance Center, Agazziz House \$k437-2247
307 8#\$aOct. 1, 1992, 2 p.m.
440 #0\$aLearning through Performers Program
511 ##\$aA lecture/demonstration by Paul Dresher and Rinde Eckert, composers and members, Paul Dresher Ensemble.
520 8#\$a“About ‘Pioneer’, which examines the burden of the American frontier past and the uncertainty of the future through Dresher’s innovative electronic score and Ekert’s arrangement.”
531 ##\$bGeneral admission, \$6.00; free for Harvard and Northwestern faculty, staff, and students; half-price discount for seniors, students, and advance sales buyers.
650 #0\$aTheatre.



貳、US MARC 社區資訊格式應用上的問題

US MARC 社區資訊格式自公布以來，一些自動化系統中亦有增列社區資訊記錄者，但也被一些大學和公共圖書館以及圖書館系統代理商所採用，社區資訊格式但並不常被使用，似乎並未得到圖書館界之重視，其原因分析如下：(註 10)

- 一、編目對象之選擇：由於社區資源甚廣，非書目性資料種類繁多，如何選擇適當的資源，根據何種編目規則，特質不易取捨，又圖書館如何訂定其館藏發展及採購非書目性資料之政策皆需要進一步的研究及規範。
- 二、編目規則：任何一種機讀格式之設計，除社區資訊格式外，皆是先有編目規則再訂定格式。對社區資訊而言，情況複雜，訂定編目規則並不容易，正因為無適當之編目規則可依據，其標目形式和資料單元的款目以及統一用語之問題甚多。
- 三、資訊來源：社區資訊來源甚廣，難以掌握，如何確定和評估其來源之真實性，皆需費時查詢確認。以個人記錄為例，常由於介紹個人為依據為宣傳材料，是否適合選用列入記錄很有爭議。
- 四、記錄之更新：社區資訊多為動態的，變化無窮，除一些已完成的事件外，組織機構之改變，服務項目之變更，個人資料等，常因更新太慢而使記錄失去真實性、正確性、有效性，故需要常常維護，時時更新記錄；又何況社區資訊記錄需要原始編目(Original cataloging)，所需人力時間甚多，以圖書館有限的人力而言，書目性的記錄已耗去甚多

人力，已無力顧及非書目性的資料。

雖然，社區資訊格式在應用上有多種問題，但由於其活潑有彈性，而優點甚多，如例用社區資訊格式建立內部館員資料、各種活動節目，如內部訓練、會議、新知告知等。亦可將校園內之設備、活動、服務項目，利用此格式建置於線上目錄中，供讀者使用。對外可建立個人關係聯絡之資料網路，亦可增強對外界之公共關係。何況將社區內公園、游泳池、高爾夫球場和其他設施之資訊一併建置亦是很有意義的資訊！雖然這些資訊皆需原始編目，但大家一起來，正如書目性資料庫，亦是一筆筆建立起來的。(註 11)

參、結論

當今圖書館界正在憂心如何處理那麼多的非書目性資源，如網路資源、機構團體、個人資料、服務項目或事件等等，國內外一窩蜂的設計各式各樣不統一規格之 Metadata 格式，如 Dublin Core、MICI 等，其實這些格式設計理念仍看到 MARC 之影子，為何不考慮試用 MARC 社區資訊格式？而另創新格式，使大環境又掀起了春秋戰國時代之局面，各自挖空心思，各顯風騷，到頭來各做各的，各玩各的，製造亂局。MARC 社區資訊格式，其設計活潑、有彈性，並採用 ISO 2709 及 ANSI 39.2 之標準，是很容易溶入現有 MARC 之資料庫中。因此作者特撰文介紹 MARC 21 社區資訊機讀格式，並建議圖書館與資訊界不妨嘗試研究運用此格式，以解決所有資料資源處理上之問題，俾使世界上各類型資源記錄之標準統一。

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註 釋：

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- 註3 : 同上註。
- 註4 : Phyblis Burns, "The US MARC Community Information Format: A History and Brief Description," Information Technology and Libraries 11:4 (Dec. 1992), pp.387-392.
- 註5 : 同上註, pp.392-401.
- 註6 : <<http://lcweb.loc.gov/marc/community/eccilist.html>> (Jan.8, 2001).
- 註7 : 同上註; "The MARC 21 Formats: Background and Principles," Nov. 1996, <<http://www.lcweb.loc.gov/marc/96principl.html>> (Apr. 26, 2001).
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"MARC 21 Concise Community Information: Introduction;" <<http://www.loc.gov/marc/community/ecciintr.html>> (Apr. 26, 2001).
- 註9 : MARC 21 Format for Community Information: Including Guidelines for Content Designation, 2000 ed., prepared by Network Development and MARC Standards Office, Library of Congress in Cooperation with standards and Support. National Library of Canada. Appendix B. pp.1-4.
- 註10 : 同註 8。Deborah J. Byrne, pp.237-239。
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- 註11 : 同上註。

