#### **RDA**

# (Resources Description and Access) A new standard for digital environment

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#### **Abstract**

Digital technologies have changed widely environment of libraries and information centers and other knowledge management organizations. So, these organizations have started designing and keeping of data bases in order to access their recourses. According to nonstop-increasing resources in these data bases and the lack of an international standards which make these resources descriptive and accessible, introducing and representing such standard is necessary. RDA as a new standard for description and access to digital resources has been designed to overcome these problems. It is based on Anglo American Cataloguing Rules (AACR). RDA is a collection of instructions and guidelines which is used to describe and access to all kinds of resources and media.

We will introduce the new international standard, RDA, with a review of previous cataloguing rules in this article. RDA is being surveyed of different aspects as: necessities, structure, and consequence of use, characteristics, goals, strategies, revised and development processes. The outline of this standard will be introduced and surveyed properly.

One of the important results of this paper is that the librarians and information scientists become familiar and aware with RDA and usage of it in libraries and scientific information centers.

**Key words**: RDA, new standards, digital environment, descriptive cataloguing, library and information sciences.

#### Introduction

Digital technologies have changed widely environment of libraries, archives, museums, information centers and other knowledge management organizations. So, these organizations have started designing and keeping of data bases in order to access their recourses.

Resources in these data bases are increasing fast, one of the most important factors of improving such data bases is the amount of their information, on the other hand these data bases are affected by new technologies, any change and improvement in new technologies can change them. These changes cause to provide access to their resources in new platforms.

JSC (Joint Steering Committee on revision of AACR) started to design a new standard draft to overcome these changes. RDA has been designed to describe different resources and make them accessible.

It is based on Anglo American Cataloguing Rules and all of libraries, archives, museums and publishers and other related organization can use it. Chapman (2006) believes that RDA has been designed by JSC in order to have better coordination and relationship with new technologies of databases with the goal of establishing new standard and will be improved. This article introduces RDA as a new standard applied to describe and access resources. We also present the objectives, necessity and analysis of RDA design from various aspects.

## A glance on previous rules and principles of cataloguing

First, let us look at previous works to understand individuals or organizations effort during the time and to know that current standards consisting AACR or even RDA is the result of their efforts. With no doubt, he setting of AACR principles started far back ago. Panizzi presented cataloguing rules of British museum in 1841. The most important conception of his rule was "Every book must have a main entry in list" (Panizzi, 1841).

Cutter designed his 369 rules about description cataloguing ,subject heading and filing named" rules for cultural catalogue" in 1876(Cutter, 1876).

It is remarkable that another cataloguing rules were used in America and England till the first years of 20<sup>th</sup> century but two important activity happened internationally that every community accepted decisions had been made in 1969s. One of the events was Paris conference in 1961 and the other was international conference of cataloguer in Copenhagen in 1969.

A committee was established to provide and improve standards for descriptive cataloguing of monographs. The first edition of "International Standard of Bibliographic Description (ISBD) for monographs" published in 1971(Fattahi, 2005), but the cataloguing changing point of descriptive cataloguing rules in 20<sup>th</sup> century was the first edition of AACR. The second edition was published in 1978 and the third one (with a revision) in 1988.Descriptive AACR has improved and completed since then, but JSC decided to publish a new standard in order to describe and access to resources called RDA based on the needed information of societies in 2005.These standards were supposed to be published in 2008 based on its schedule but the committee announced that RDA will be published in 2009.

## Why is RDA needed?

Rapid changes in computerized catalogues technologies and the new electronic environment effects on them resulting the need of revising AACR. Regarding this fact, four fundamental countries (United states, Australia, England and Canada) have paid attention to AACR in " The International conference of AACR principles and its futures in 1997. They were supposed to publish a new document based on new suggested changes (Fattahi, 2005). But the majority concluded that limitations of AACR2 will not be over come with a new edition and so a new instruction is necessary. This view point invigorated by IFLA studies about FRBR (Functional Requirement for Bibliographic Records) in 1998. These studies have been resulted a conceptual model, communications and characteristics which are independent of all previous communication frames or data structures.

Chapman (2006) believes that because of all of these challenges, RDA was chosen by JCR instead of third version of AACR.

Moderios (2006) noticed that most of cataloguers had a positive thought about RDA after studied its draft. Most of expertise welcomed simplifying that causes RDA be distributed and become international .In other word two basic needs that cause RDA to be written are simplification and internationalization. Another feature of RDA is its independency and not to be limited in a special frame work, JSC noticed this view point and said this standard should be independent in order to be used by metadata standards.

## **RDA** characteristics

## **Simplification**

Over time, the rules had become more complex, in an attempt to cover increasingly diverse and complex resource formats. General rules were followed by chapters for specific rules covering books and other printed materials, cartographic materials, manuscripts, music, sound recordings, motion pictures and video recordings, graphic materials, electronic materials, 3D items, microforms and continuing resources (e.g. serials)(Chapman, 2006). RDA aims to phrase

rules more simply so that they can easily be applied to a variety of resources with the minimum of specific instruction, and with the aid of suitably chosen examples.

#### Structure

The current structure of AACR2, noted above, is in itself the source of some problems. The arrangement of the descriptive chapters by resource type means that the cataloguer must first decide on the format or material type of the resource to be described in order to locate the appropriate chapters to use. However, there is no clear guidance as to how the decision should be made. While this may be obvious for some resources (e.g. a single textual manuscript), in others it will be less so - is a music serial primarily 'music' or a 'continuing resource' RDA plans to address this by placing identification of the resource type as the first step in the cataloguing process, and therefore at the beginning of the general instructions (Joint Steering Committee, 2006).

## Consistency

The AACR2 structure of general and specific rules led to a situation where some resources were catalogued in slightly different ways to other resources. Alternative rules in some areas and optional additions to rules further complicated things, to the extent that two catalogue records for the same item could be created using AACR and yet have substantial differences. RDA aims to simplify rules so that they are more easily applied to a range of resources and to limit alternative variations in treatment (Chapman, 2006).

## Collocation

Today's information environment is one in which individual information resources are available in a range of formats and often with a number of derivative works. For example, a novel may exist in hardback and paperback, standard and large print, Braille and Moon tactile formats, digital files and spoken word recordings on audio tape and CD. Additionally, it may be the source work for films, musicals, operas and ballets, or the inspiration for prequels, sequels and related works by the same or different authors. There is a whole range of relationships between these entities, which have been described in FRBR, but AACR does not directly reflect this theoretical model and the terms that it uses. These relationships are important in enabling catalogues to collocate appropriately records that are retrieved from searches to reflect these relationships. RDA will include a chapter on relationships in addition to incorporating FRBR terminology throughout the text (Joint Steering Committee, 2005)

## **Principle-based Rules**

The general and specific rule structure and the provision of alternative instructions, led to a situation where rule interpretations were developed to assist cataloguers. RDA aspires to develop a set of rules that is based on clearly stated principles, with limited alternatives, that will enable cataloguers to build their own judgment and expertise.

#### **Content and Formats**

Bringing AACR into line with ISBD resulted in the use of 'general material designation' (GMD) and 'specific material designation' (SMD) terms. Potentially these terms can be used in systems as filtering parameters (find only DVD)

version(s) of a film and not video), display sequence parameters (for a single work with 8 text versions, 3 spoken word recordings, 1 digital file and 1 Braille text) and content information (musical notation and recorded performances of a musical work). To date, use of GMD and SMD terms has been limited and patchy, partly due to problems inherent in the lists of terms. There are 2 GMD lists, one British and a slightly longer North American/Australian one. Confusingly, GMD terms cover both content (e.g. music, cartographic material) and format (e.g. Braille, filmstrip). Additionally, as the range of information carriers increased rapidly, SMD terms became increasingly out of touch with user practice: authorized terms include 'sound cassette' and 'videodisc' and not the more commonly used audio tape and DVD. In an effort to address this, recent revisions of AACR2 have included some options to use such product-related terms. RDA will replace the GMDs and SMDs with a more flexible approach, within which existing content and carrier terms can be defined without precluding the use of other terms that may be required in the future (Mederios, 2006).

#### Internationalization

AACR evolved in the English-speaking cultures of Britain and North America and certain aspects of it have an Anglo-American bias. Meanwhile, other countries had developed their own sets of cataloguing rules, which had both common ground with, and divergence from, AACR (Mederios, 2005).

One example is the *Regeln für die alphabetische Katalogisierung* (RAK)used in Germany. RAK is mainly based on the Copenhagen and Paris Principles, and replaced the Prussian Instructions (PI) as the standard cataloguing rules in Germany in the 1970s and early 1980s. There are major differences between RAK and AACR, although both are based on the Copenhagen and Paris Principles.

The library world was quick to recognize the economic advantage of the 'create an electronic catalogue record once, and reuse it many times' principle, with the result that there is globally a great deal of bibliographic data exchange. As this exchange increases, it has highlighted the obstacles to exchanging data created to different sets of rules. The Anglo-American bias in the AACR2 is seen as a barrier to wider adoption in some areas of the world, where the information community is increasingly international. The aim with RDA is therefore to base it on internationally agreed cataloguing principles, and to remove instances of Anglo-American bias in the new rules.

## Goals of RDA

JSC (2006) have represented some goals for RDA .They are as follows:

- 1. The guidelines and instructions in *RDA* will be designed to:
  - -Provide a consistent, flexible and extensible framework for both the technical and content description of all types of resources and all types of content;
  - -Be compatible with internationally established principles, models, and standards;
  - -Be usable outside the library community, and be capable of adaptation by various communities to their specific needs.
- 2. Descriptions and access points produced through the application of *RDA* guidelines and instructions will:
  - -Enable users to find, identify, select, and obtain resources appropriate to their information needs;
  - -Be compatible with those descriptions and access points devised using AACR2, and present in existing catalogues and databases;

- -Be independent of the format, medium or system used to store or communicate the data;
- -Be readily adaptable to newly-emerging database structures.
- 3. *RDA* will be developed as a resource description standard that is:
  - -Optimized for use as an online tool (although a print edition will also be published);
  - -Derived from English language conventions and customs, written in plain English, and able to be used in other language communities;
  - -Easy and efficient to use, both as a working tool and for training purposes.

These goals are the long term ones. JSC has plans up to 2009 in order to achieve these goals.

## Strategies towards achieving the goals 2005-2008

- 1. To ensure that the guidelines and instructions in RDA meet the goals for consistency, flexibility, etc., outlined under Goal 1 above, we will:
- Resolve problems associated with the class of materials concept and the related issue of GMDs.
- Resolve residual problems associated with cataloguing resources that change over time, including multipart resources.
- Revise and modernise terminology to eliminate unnecessary library jargon, and eliminate ambiguous and inconsistent terminology.
- Extend consistency within the technical and content description, and eliminate unnecessary redundancy.
- Review and update the examples throughout RDA.
- Include a statement of the principles of RDA, and a description of the functions of the catalogue, and relate these to the Statement of International Cataloguing Principles.
- Align the structure, concepts and terminology of the instructions more directly with the Functional Requirements for Bibliographic Records (FRBR) and Functional Requirements for Authority Records (FRAR) models.
- Improve the coverage of materials such as digital resources, three-dimensional objects, visual materials, manuscripts and archives.
- Identify and actively involve other resource description communities and other stakeholders in the development of RDA in accordance with the RDA communication plan.
- 2. To ensure that descriptions and access points produced through the application of RDA meet the goals for functionality, compatibility, etc., outlined under Goal 2 above, we will:
- Directly relate the elements of the description and access points to the user tasks that they support.
- Revise the instructions to facilitate collocation at the FRBR work and expression levels.
- Incorporate the concept of authority control.
- Revise the instructions relating to the choice of access points to address issues associated with the concept of "authorship" as it is currently reflected in AACR2 and restrictions imposed by the "rule of three."
- Separate instructions on the recording of data from those on the presentation of data.
- 3. To ensure that RDA is developed as a resource description standard that meets the goals for ease and efficiency of use outlined under Goal 3 above, we will:
- Work with an online product developer to develop an online tool according to functional specifications that reflect how RDA will be used. -- Provide conceptual background within RDA to assist the user of the instructions to understand the process to be followed.
- Write new text in plain English, and revise existing text wherever practicable.
- Provide a revised Glossary, and incorporate definitions into the text where needed.
- Consult with educators and trainers, and plan for activities that support the implementation of RDA.

- 4. To ensure that RDA is ready for publication in 2008, we will:
- Develop, implement and maintain a Business Plan.
- Establish an effective project management structure, including the appointment of a project manager.
- Balance community input with the need for RDA to be ready for publication within the timeframe.
- Employ appropriate risk management processes.

#### The structure of RDA

RDA standards will be a reference for description and access to different resources .the structure of RDA is such a way that individuals can recognize basic instructions and use them. These standards have been written in three parts and each part in several chapters:

The first part is description of resources, the second part is relations and the third part is retrieval indicators control. (Joint Steering Committee, 2005).

The content of each chapter will be introduced:

## Part I – Resource Description

Chapter 1 will provide general guidelines on determining the appropriate type of description to use (comprehensive, analytical, or multilevel description), changes requiring a new description, mandatory elements of description, language and script of the description, conventions used in transcribing descriptive elements, the formulation of notes, and descriptive elements used as access points.

Chapter 2 will focus on the descriptive elements that are most commonly used for purposes of identifying the resource. The elements covered will include title, statement of responsibility, edition/issue designation, etc. — information that users rely on to confirm that the resource described corresponds to the one sought, or to distinguish between two or more resources bearing similar identifying information.

Chapter 3 will focus on the technical description of the resource. The elements covered will include those that users make use of when selecting a resource to meet their needs with respect to the physical characteristics of the carrier, the formatting and encoding of the information stored on the carrier, the mode of accessing the resource, etc.

Chapter 4 will focus on the content of the resource. The elements covered will include those that users make use of when selecting a resource to meet their needs with respect to the form of work, audience, language, etc. Chapter 4 will also include elements that reflect content-oriented relationships (e.g., sources on which the content of the resource is based).

Chapter 5 will focus on information on the availability of the resource. The elements covered will include those that users make use of to acquire or access a resource (terms of availability, contact information, etc.).

Chapter 6 will focus on item-specific information. The elements covered will include provenance, marks/inscriptions, condition, access restrictions, etc. — information that pertains specifically to the copy or copies of the resource held by the agency describing the resource.

Instructions in chapters 2-6 will be presented in groupings that correspond to the logical attributes of entities defined in FRBR. For example, in chapter 2, the "title" grouping will cover instructions pertaining to all data elements subsumed under the attribute that FRBR defines as "title of the manifestation" (i.e., title proper, parallel title, variant title, keytitle, etc.).

## Part II - Relationships

Part II will contain an introduction and four chapters providing guidelines and instructions on reflecting relationships: Introduction to part II

- Chapter 7. General guidelines on reflecting relationships
- Chapter 8. Access points reflecting relationships to persons, families, and corporate bodies
- Chapter 9. Citations for related works, etc.
- Chapter 10. Special instructions for particular types of works

The introduction to part II will outline the functional objectives and principles of reflecting relationships. It will also explain how part II is structured and how it is to be used.

Chapter 7 will provide general guidelines on bibliographic conventions for reflecting relationships, sources of information, and levels of relationships.

Chapter 8 will provide a set of general guidelines and instructions on choosing the primary access point (i.e., the access point used as the initial element in citing a work) as well as other access points reflecting relationships between the resource described and persons, families, and corporate bodies associated with the resource. It will also provide general instructions on how to reflect changes in responsibility and on designations of function.

Chapter 9 will provide general instructions on the use of citations to reflect relationships between the resource described and other related content and resources. Chapter 9 will also provide specific instructions on using analytic citations, citations for related works, etc., and series citations.

Chapter 10 will provide special instructions on choosing the primary access point and other access points for particular types of works. The instructions provided in chapter 10 will reflect citation practices for the types of works covered that differ from the standard citation practices reflected in the general guidelines and instructions provided in chapters 7-9.

## Part III -Access Point Control

Part III will contain an introduction and seven chapters providing guidelines and instructions on formulating access points and recording data used in access point control:

Introduction to part III

Chapter 11. General guidelines on access point control

Chapter 12. Names of persons

Chapter 13. Names of families

Chapter 14. Names of corporate bodies

Chapter 15. Names of places

Chapter 16. Citations for works, etc.

Chapter 17. Other information used in access point control

The introduction to part III will outline functional objectives and principles of access point control. It will also explain how part III is structured and how it is to be used.

Chapter 11 will provide general guidelines on sources of information, levels of access point control, transcription, language and script of access points, the structure of access points, and the use of references.

Chapters 12-15 will provide general instructions on choosing the preferred name of a person, family, corporate body, or place, ordering the elements of the name for use as an access point, adding identifying elements to the name to differentiate entities with the same name, and using variant and related names as references. Chapters 12 and 14 will also provide additional instructions for specific types of names (e.g., personal names in various languages, names of government bodies and officials).

Chapter 16 will provide general instructions on constructing citations, choosing the preferred title for a work, adding identifying elements to the title to differentiate works with the same title, etc., and using variant and related titles as

references. Chapter 16 will also provide additional instructions on formulating titles and citations for specific types of works (e.g., music).

Chapter 17 will provide instructions on recording information other than names and titles that can be used either to identify a person, family, corporate body, place or work (e.g., date and place of birth of a person, or the location of the headquarters of a corporate body) or to account for the form chosen as the preferred name or title (e.g., the country of residence of a person, or the place of origin of a work). Chapter 17 will also provide instructions on citing sources consulted in choosing and formulating names and titles for use in access points and citations.

#### **Appendices**

RDA will contain five appendices:

Appendix A. Capitalization

Appendix B. Abbreviations

Appendix C. Initial articles

Appendix D. Presentation of descriptive data

Appendix E. Presentation of access point control data

Appendix A will provide instructions on conventions for capitalization of data transcribed in English as well as for data transcribed in a number of other languages.

The instructions in the appendix will supplement general guidelines on capitalization provided in chapters 1 and 11. Appendix B will provide lists of abbreviations for use in bibliographic descriptions, including abbreviations for certain countries, states, etc., abbreviations for the names of months, and abbreviations used in citing bibliographic sources. The lists in the appendix will supplement general guidelines on the use of abbreviations provided in chapters 1 and 11. Appendix C will provide a list of definite and indefinite articles in a number of languages that are to be either omitted or treated as non-filing characters when they occur at the beginning of an access point or at the beginning of a title used in a citation

Appendix D will provide guidelines and instructions on the presentation of descriptive data elements. The appendix will include a table showing how the specific data elements covered in chapters 2-6 can be mapped to the areas and elements defined in the ISBDs to produce a display that follows the established ISBD order of elements and prescribed punctuation. Instructions on the presentation of "In" analytics and multilevel descriptions based on ISBD specifications will also be included. In addition, Appendix D will provide guidelines on presenting descriptive data elements in other forms, such as those typically used in OPAC displays.

Appendix E will provide guidelines and instructions on the presentation of data used in access point control. The appendix will include a table showing how the specific data elements covered in chapters 12-17 can be mapped to the areas and elements defined in GARR to produce a display that follows the established GARR order of elements and prescribed punctuation. In addition, Appendix E will provide guidelines on presenting access point control data in other forms, such as those typically used in OPAC displays.

#### How the Revision Process Works

A structure of committees and organizations underpins AACR. The Committee of Principals oversees the work of the AACR Fund Trustees/Publishers and the JSC. The JSC is made up of representatives of the American Library Association (ALA), the Australian Committee on Cataloguing (ACOC), the British Library (BL), the Canadian

Committee on Cataloguing (CCC), the Chartered Institute of Library and Information Professionals (CILIP) and the Library of Congress (LC).

In the UK, the JSC representatives from CILIP and the BL are members of the CILIP/BL Committee on AACR, along with four members nominated by CILIP and three members by the BL. There are also several invited members with backgrounds in specific areas such as digital or art materials or in the national libraries of Scotland and Wales and the committee contacts specialist groups when considering specific proposals and issues.

Creating the text of RDA is a collaborative process that is timed to work in the context of what are currently twice-yearly meetings of the JSC. The JSC and/or the Editor (Tom Delsey) create drafts of the text, while any of the constituent committees can put forward proposals for changes to rules or for new rules. These drafts are issued for constituency review, with JSC members responding on behalf of their respective committees or organizations. Where there is consensus, the Editor will take the next steps in preparing new drafts. In other cases, working groups will be set up to review specific areas and make further proposals or recommendations. A further round of drafts and proposals will then be issued for comment. This process continues until a final approved text has been agreed. The JSC has also made the process more open by publishing most documentation online. It has also engaged with other communities during the review process in order to ensure that RDA can be applied widely.

#### How can get ready for publishing RDA?

Regarding to the program released by JSC, RDA will be published in 2009. Its a good opportunity for libraries and information centers to get ready monetary for buying it online or printed one. Of course there is no price considered yet but it likely depends on the nature, size and the number of users of the organizations. There is two years until publishing RDA, this is a good time for libraries to plan about their staffs instructions. National libraries of countries like Australia, Canada, England and USA have programs for using RDA. As these countries are the main designer of this standard have not predict an international instruction should release manuals about how to use RDA simultaneously and after publishing RDA. As national libraries all over the world have the major role in great information policies. They should plan strategies about using RDA. In other word to predict costs, to teach staffs and to provide appropriate bases for accepting this new standard is necessary for every country.

#### **Progress**

JSC is aiming for an initial release of RDA in 2009. This will be the culmination of a five-year period of intense activity. The initial proposals envisaged a three-part structure (covering resource description, relationships and access point control). The draft of Part 1 issued in December 2004 received much negative comment on the approach being taken, with the result that the JSC decided to abandon the draft and go back to the drawing board.

The prospectus for RDA was issued to the committees in July 2005, followed by a draft of most of Part 1 in December 2005. Responses were more favorable to the new approach, although a number of issues were identified as requiring further work. 2005 saw additional work on the issue of content and carrier. JSC set up a working group to review this area; its report recommended that content and carrier information was needed for both search and display purposes and, since current listings of GMDs and SMDs were not appropriate, proposed new sets of terms. In a parallel initiative, JSC worked with the creators of ONIX, the book trade XML message format, on harmonizing the ONIX material categories

with RDA content and carrier terms. These two reports were used by the Editor to produce a draft for the relevant sections of RDA(Chapman, 2006).

In April 2006, drafts of the remaining chapters of Part 1, now designated Part A in a new two-part structure, were issued for review. Responses to these documents will be considered at the October 2006 JSC meeting. The period between October 2006 and April 2007 will focus on Part B, while the period May to September 2007 will consider the general introduction, appendices and glossary (Joint Steering Committee, 2006).

Work is already being undertaken in some of these areas. Two working groups have been set up to look at examples required for inclusion in RDA. Their remit is to make a thorough review of existing examples, with a view to recommending the omission or replacement of some existing examples and proposing new examples where these are needed. Work is also underway on revision of the appendices. At present the following appendices are envisaged: capitalization, abbreviations, initial articles, presentation of data and a glossary. There is a move for RDA to permit less use of abbreviations in bibliographic records (for example: s.l. and c.). However, this raises issues about the language of full text replacements: 'date not known' and 'date not stated' are not equivalents. A counter-argument suggests retaining abbreviations, such that systems could be designed to display full text in the language of the specific catalogue.

Proposals have been put forward to extend the lists of initial articles with lists for several additional languages, with the result that this is now becoming an extensive document. This increase in size and the question of future additions and maintenance have prompted suggestions that this information should not be part of RDA but a supplementary work.

During early discussions about RDA, the CCC had proposed that there be a mapping of specific RDA rules and the appropriate / relevant field(s) in MARC 21. The JSC agreed that this would be useful and the task of carrying out this work was devolved to CCC and ACOC. The work will identify where RDA will affect MARC 21 and also where existing data provision in MARC 21 may indicate a need for inclusion within the rules in RDA. The JSC plans to submit a discussion paper on these areas to the January 2007 MARBI meeting.

#### Conclusion

RDA is a new standard for resource description and access, designed for the digital environment, aimed at all who need to find, identify, select, obtain, use, manage and organize information. It is a multinational content description standard covering all media, that is independent of technical communication formats. There are many expertise from different countries who are contributing RDA, their activities and progresses can be seen in this web site: <a href="https://www.collectionscanada.ca/jsc/rda.html">www.collectionscanada.ca/jsc/rda.html</a> Although AACR is the origin for designing RDA, using RDA is easier, its rules are more flexible and is more cost benefit. At last the most important advantage is that libraries and information centers can use databases by the help of new standards of RDA with the minimum changes in their systems.

## References

1-. Chapman, A. (2006)." RDA: A New International Standard". ARIADNE.Issue49 available at:

http://www.ariadne.ac.uk/issue49/chapman

- 2-Cutter, C. A.(1876). Rules for a Printed Dictionary Catalogue. Washington, D.C.: Government Printing Office.
- 3-Fattahi, R. Taheri, M. (2005) Cataloguing, principles and rules. 4<sup>th</sup> edition., Tehran: Ketabdar.
- 4-IFLA Study Group (1998). *Functional requirements for bibliographic records*. Munich: K.G. Saur. available at: <a href="http://www.ifla.org/VII/s13/frbr/frbr.htm">http://www.ifla.org/VII/s13/frbr/frbr.htm</a>
- 5-Joint Steering Committee for Revision of AACR (2005). "RDA: Resource Description and Access." Available at: <a href="http://www.collectionscanada.ca/jsc/docs/rdapptmay2005.pdf">http://www.collectionscanada.ca/jsc/docs/rdapptmay2005.pdf</a>
- 6-Joint Steering Committee for Revision of AACR (2006). "RDA: Resource Description and Access." Available at: <a href="http://www.collectionscanada.ca/jsc/docs/rdapptmay2005.pdf">http://www.collectionscanada.ca/jsc/docs/rdapptmay2005.pdf</a>
  - 7-Medeiros, N. (2006)." Metadata in a Global World". OCLC Systems & Services 22(2):pp.89-91.
- 8-Medeiros, N.(2005). "The Future of the Anglo-American Cataloguing Rules". *OCLC Systems & Services* 21(4):pp. 8-12.
- 9-Panizzi, A. (1841). "Rules for the Compilation of the Catalogue," *Catalogue of Printed Books in the British Museum*, v. 1, p. [v]-ix.
- 10-Statement of Principles Adopted at the International Conference on Cataloguing Principles, Paris, October 1961. (1971). Annotated ed. with commentary and examples / by Eva Verona, assisted by ... [others]. London: IFLA Committee on Cataloguing.