Barbara Tillett has given us an overview of the models and principles that are the foundation of RDA, and she has described how they will enable us to prepare for the future.

Today I will speak about:

How other standards have influenced RDA, and in particular some of the specific ways in which FRBR has influenced RDA

Then I will talk about the structure of the RDA standard and the content of the different parts of RDA

And lastly, I’ll describe how the development process works now, and into the future
In her presentation Barbara Tillett explained the FRBR and FRAD conceptual models, and indicated why they are important in building both the cataloguing standards, and the catalogues, of the future. These models will be reflected in RDA in a number of ways.

Firstly, these models will be reflected in RDA’s scope. For its first release the scope of RDA will be bibliographic data and authority data as it is represented in FRBR and FRAD. In the future the scope of RDA may be expanded, for example to cover rights management or preservation data, or data used by the museum community.

Secondly, the models will be reflected in the RDA element set. Thirdly, the FRBR user tasks will influence the RDA elements that are defined as core elements. Fourthly, the terminology used in the models will be reflected in RDA. Finally, the models will be reflected in RDA’s structure, that is in the organisation of the chapters in RDA.

Please note that as work on FRSAR is just beginning RDA will not cover subjects in its first release. However, placeholders for these concepts have been built into RDA. FRSAR entities have been shown in blue on these slides to indicate they will be covered by placeholders only.

Changes to descriptive standards such as RDA are important as first steps towards the realisation of FRBR. But of course, it cannot be realised through RDA alone, as it also requires changes to encoding and to the systems used to support resource discovery.

Let me briefly expand on the influence of FRBR on RDA’s element set, core elements and terminology before taking you more slowly through the structure and content of RDA.
FRBR entities, attributes and relationships are represented in the RDA element set or element vocabulary. Other standards have also influenced the RDA element set including AACR, the ISBD, MARC 21 and Dublin Core.

The RDA element set has clearly defined elements for both attributes and relationships. Some new elements that were not in AACR have been added to RDA, for example there is a specific carrier type for online resources and there is an element for encoding formats. Other AACR elements have been split if they covered more than one concept. For example, the General Material Designation covered both content and carrier. It has been split into Content type and Carrier type, and there is also a separate element for Media type.

This allows for cleaner mapping to and from some key other standards, which is important for interoperability. Mappings to ISBD, MARC 21 and Dublin Core will be included in RDA, and mappings to other schema may be added in the future. As well as allowing for better mappings, a clean element set also facilitates machine manipulation of the data elements.

In addition we have developed a range of vocabularies to be used in certain RDA elements. These include the terms for content, carrier and media type as well as the relationship designators. Gordon Dunsire will be elaborating on some of this work this afternoon. We hope that collaborative work on vocabularies will continue into the future, after RDA’s initial release.
For the technically minded there is an RDA element analysis table which lists all of the RDA elements and indicates their names and properties.

RDA elements can have element sub-types and sub-elements.
Element sub-types all fall under the definition of the element. For example, the element of “Title” has sub-types for “Title proper”, “Parallel title”, “Other title information”, and so on.
Sub elements are components of the element. For example the element of “Edition statement” has sub-elements of “Statement designating edition”, “Statement of responsibility relating to the edition” and so on.

This element-based approach of well-structured metadata is similar to structures being used by other metadata communities. If you are unused to this it may seem a little daunting at first, but once you begin to use it you can see that it is very logical and actually breaks things down in a simple way.
Barbara Tillett described how FRBR defines the entities, attributes and relationships that are important to libraries. Another feature of these models is that they have a user focus. That is, they relate the data recorded in bibliographic and authority records to the needs of the users of those records. In the case of FRBR, they also assign values to particular data elements to show how important that data element is in meeting a user task. We have used this information in determining the core elements for RDA.

The user tasks identified in FRBR are:
Find, (for example to find an item by an author; on a particular subject; or with a certain title)
Identify, (for example to confirm that the item is the one they are looking for; or to distinguish between items with the same title)
Select, (for example to check the form of an item, e.g. a sound recording; or its suitability for a particular group, e.g. high school students)
Obtain, (for example information needed to purchase an item; or to access a remote resource)

There is another user task which derives from the tasks already mentioned, that is ‘relate’. By providing data which relates one entity to another we can navigate the catalogue by following those links or relationships.

FRAD has defined the following user tasks that relate to authority data: Find, Identify, Contextualize and Justify. In RDA these last two tasks have been re-written from the point of view of the users of the catalogue, and are called Clarify and Understand.

For RDA we feel it is very important to define as essential or core, those elements that meet these user tasks.
As well as the information on user tasks from FRBR and FRAD, information from other standards has been used to inform our selection of RDA’s core or essential elements. RDA’s core elements reflect the combined knowledge and expertise of a range of information experts. However, the JSC are well aware of the need for empirical research into the utility of different data elements in meeting user tasks.
FRBR and FRAD will also influence the terminology and definitions used in RDA. In particular, the names of the FRBR entities will be used in RDA.

In RDA we are also replacing AACR terminology which, in many cases, reflected AACR’s origins in the card catalogue.

We also recognise that there are new ways of achieving the same ends in new catalogues and resource discovery systems. For example, the concept of authority control is changing now that there is the ability to choose different display names for the same entity, with each user group seeing the form or language for a name that best suits them. So terminology relating to earlier ways of looking at these concepts is being changed.
In developing RDA we are conscious that it will be implemented in different database structures. Barbara Tillett talked about the different implementation scenarios in her presentation. Let me remind you of those scenarios as I will refer to them as I outline the planned structure or organisation of RDA.

As Barbara Tillett indicated, one of the scenarios reflects the present. In the database structures commonly used in library systems, data is stored or exchanged using linked bibliographic and authority records, and in some implementations in holdings records as well. If we had linked RDA too closely to these types of database structures it would be difficult to move to the future.

In some library systems today, and increasingly in the future we expect data will be stored in a relational or object-oriented database structure that mirrors the FRBR and FRAD conceptual models. In this type of structure there would be separate records for each FRBR entity. Relationships between the entities would be made using links. The links might be access points, but are more likely to be identifiers, preferably persistent identifiers. The changes made in RDA will help us move towards this future.

The new database structures are important on a number of levels. For cataloguers and system administrators they will improve the efficiency of data creation and maintenance. This will happen, for e.g. by allowing data for works and expressions to be created once only, and re-used as needed.

The new database structures will also improve the ease and effectiveness with which users are able to access the data and navigate the database.

Of course it is important not to neglect the present in favour of the future, so we must be able to use RDA data in both types of implementation scenarios. In each case we are ensuring that the data will support the functional objectives that RDA is designed to fulfill.
So, let us look now at the structure of RDA.

RDA will begin with a general introduction which will cover the objectives and principles for resource description, plus information on the conceptual models that have informed RDA’s development. The general introduction will also bring together information on RDA’s core elements, although these will also be indicated throughout the text.

The main text of RDA has two parts, one covering attributes and another covering relationships. Within those parts there are:

Four sections defining the attributes that may be used to describe each of the entities, and also

Six sections defining the relationships that may be made between these entities

Each section begins with a chapter of general instructions which include definitions for the key terms for that section, followed by chapters for the specific entities.

Lastly RDA will include a range of appendices.

Although we have ensured that RDA is organised in a logical way, the structure of RDA will be of less importance in a web product than it is in a purely print product. The best place to find an overview of the structure of RDA is in the Prospectus, and of course the General introduction to RDA when it is issued.
The first four sections are about recording the attributes of the three groups of FRBR entities. These attributes are treated as separate data elements.

Sections 1 and 2 cover the Group 1 entities, and each of the chapters in these sections are associated with a particular user task.
In RDA they are not arranged in the FRBR order of “Work, expression, manifestation, and item”. Instead the RDA structure acknowledges that the cataloguer starts with the resource on the desk or on the screen in front of them. Of course, RDA does not dictate the workflow to follow in creating data, and so you could find or create the work record first.
The instructions in Section 1 are what you would use to create a bibliographic description. They include instructions on recording the identifying information that is found on the resource, such as the title, the publisher and so on, as well as information describing the carrier.
The instructions in Section 2 mostly cover elements that would be found in a name/title or a title authority record. However, there are also instructions for recording elements to do with the work or expression, such as a summary of the content, which you would currently find in bibliographic records. Also included in these chapters is information on creating preferred and variant access points for works and expressions which would be used today in both the bibliographic and the authority records.
In the future separate records would be created for each entity, so instead of bibliographic, authority and holdings records you would create records for works, expressions, manifestations and items. There will be many opportunities for library systems to assist in making the creation of these separate records a simple and streamlined process.
Section 3 covers the Group 2 entities of person, family and corporate body. These instructions cover what you would use today to create name authority records, but they contain a number of additional elements as outlined in FRAD. For persons these include place of residence, gender and profession or occupation. Also included in these chapters is information on creating preferred and variant access points for these entities that would be used today in both bibliographic and authority records.

Section 4 for the Group 3 entities will mostly contain placeholders with the exception of the chapter on “Place”. By “placeholders” I mean that there will be no instructions for these included in RDA when it is first released. Concepts, objects and events are usually found in subject authority records. They were not covered in AACR, and they will not be in scope for the first release of RDA.
The next part of RDA covers the recording of relationships. When I say ‘relationships’ in this context, I mean bibliographic relationships, such as between an author and the book they wrote, or between one version of a symphony and another.

RDA will allow for different conventions in recording relationships: both the use of access points and the use of identifiers for linking. Relationship designators are also used to indicate the nature of the relationship.

As Barbara Tillett indicated, the introduction of these concepts into RDA is an important step. Relationships allow the user to navigate the catalogue or resource discovery system. For example, they allow resources to be grouped to show they belong to a particular work or expression. This can be used to allow users to move between related works, or to organize large results sets in a way that is more meaningful to users.

Because recording relationships in this way may be new for many, I will explain these sections in some more detail.
Section 5 covers relationships between the Group 1 entities of work, expression, manifestation and item such as ‘the work expressed’, or ‘the expression manifested’. They are the primary relationships in the FRBR model.

Section 6 deals with relationships from Group 1 entities to Group 2 entities. This will include relationships between a creator and a work, a contributor and an expression, and so on. In our bibliographic records today we reflect these relationships by adding access points. In addition, RDA will allow for the use of role designators so you can be more specific about the nature of the relationship. For example, you could choose to specify that the composer of ‘The four seasons’ is Vivaldi.

Section 7 on subject relationships will be a placeholder. Today, we would show these relationships by adding subject terms to bibliographic records.
Section 8 is about recording relationships between the Group 1 entities. The instructions are organised using a taxonomy developed by Barbara Tillett.

They include:

- Equivalence relationships – e.g. two formats of the same sound recording.
-Derivative relationships – e.g. a novel, and a play based on that novel.
- Descriptive relationships – e.g. a film, and a review of that film
- Whole-part relationships – e.g. a volume and the multi-volume set of which it is a part
- Accompanying relationships – e.g. a serial and its index
- Sequential relationships – e.g. an earlier or later title of a serial, or a sequel to a novel

More specific relationships will be able to be described using relationship designators such as ‘Translation of’, “Sequel to’ and so on. For example, you could specify that ‘The fellowship of the ring’ has a sequel called ‘The two towers’.

Section 9 deals with relationships between Group 2 entities and are what you may be used to seeing now as ‘see also’ references in authority records. These relationships are defined in FRAD. Again, it is possible to specify the nature of the relationships, such as Frank Seiberling is the founder of the Goodyear Tire and Rubber Company.

Section 10 deals with relationships between Group 3 entities and is another placeholder. Today we would record these as related terms in our subject authority records.
RDA will also contain a number of appendices. They will cover matters such as Capitalization, Abbreviations, and Initial articles. Some of the controlled vocabularies being introduced to RDA, such as the relationship designators, will also be given in the appendices.

Also in the appendices you will find information on data presentation, that is on how to present RDA elements in an ISBD display or MARC record format, or encoded in Dublin Core. You will also find information on record syntaxes for authority data.

The Glossary is being thoroughly revised. In addition, in the description of the scope of each chapter you will find definitions of the key terms used in those instructions and you will also be able to link through to the Glossary whenever a term is used.

There will be a sample set of examples of bibliographic and authority records. In future we hope that you will be able to link out from the examples under individual instructions to the examples of complete records.

Lastly, there will be a range of tools, such as Workflows. These will no doubt be mentioned further in Chris Oliver’s demonstration later today.

In the next few slides I would like to talk a little more about the relationship between RDA and some other standards, specifically the ISBD and MARC 21. Gordon Dunsire will be speaking about RDA and Dublin Core later today.
Firstly, the International Standard Bibliographic Description (ISBD).

Like AACR, the ISBDs were first published in the late 1960s. The ISBDs provide basic descriptive elements arranged in a prescribed order (the eight areas of description), along with prescribed punctuation. AACR also used the ISBD areas of description and ISBD prescribed punctuation. Harmony between the provisions of these two standards has been maintained over time.

In 2003, both AACR and the ISBD began to be revised. A common aim of both revisions was to cover all types of resources in a consistent way, and to make it easier to describe resources which have the characteristics of more than one format. In 2007 a consolidated edition of the ISBD was published.

Harmony between the ISBD and RDA remains a goal of the JSC. The data elements in RDA will cover all those covered in the ISBD. However, the JSC has made a conscious decision to make RDA a content standard rather than a display or encoding standard. RDA is intended to be independent of the format, medium, or system used to store or communicate the data. This is important for RDA because it allows flexibility for data to be used and encoded in a variety of ways. It also paves the way for RDA to be used in different ways in the web environment.

The appendix I mentioned previously will help to maintain compatibility with the ISBD. It will show how to record RDA data using the ISBD order of elements and punctuation. This will assist libraries wishing to display RDA data in an ISBD presentation, and it will also act as a crosswalk between the standards. The ISBD Review Group has kindly assisted the JSC by reviewing this appendix.
There has always been a close relationship between AACR and MARC 21. Many English language libraries today use AACR2 and MARC 21 together, and in the future they will use RDA and MARC 21. For this reason there will also be an appendix which maps between RDA and MARC 21.

I mentioned earlier that to fully realise the benefits of FRBR requires changes not only to our content standards such as RDA, but also to our encoding standards. We can already see that a number of changes will be needed to MARC 21. An RDA/MARC Working Group has been formed to identify the changes that are required to MARC to support compatibility with RDA.

Most RDA data elements can be incorporated into the existing MARC 21 structure. However, there are some new data elements such as Content Type, Carrier Type and Media type – the terms which replace the General Material Designation or GMD – and a place will need to be found in the MARC record to encode these. By the time RDA is released we would like some of these simpler changes to MARC to be made.

After RDA’s release, and as part of MARC 21’s continuing development, other changes may be made to that encoding standard, for example, to allow better representation of the FRBR Group 1 entities of work and expression.

Although we expect that the close relationship between RDA and MARC 21 will continue, RDA is also being designed so that it can be encoded in other schema, and also used more readily in the web environment.
Before I finish I’d like to tell you a little about how RDA is being developed.

There are currently four countries represented on the various bodies that oversee the development of RDA: Australia, Britain, Canada and the US. The Committee of Principals or CoP, the Co-publishers, and the AACR Fund Trustees make the overall decisions, fund the process and publish the standard.

The Joint Steering Committee for the Development of Resource Description and Access, the JSC, is responsible for the content of the standard. The JSC has six representatives drawn from the national libraries and/or library associations of each country. Together these groups are known as “the constituencies”. The representatives are from the Australian Committee on Cataloguing, the American Library Association, the British Library, the Canadian Committee on Cataloguing, the Chartered Institute of Library and Information Professionals, and the Library of Congress. The JSC Secretary supports the work of the JSC.

From time to time the JSC commissions different groups to assist us in completing work on specific aspects of RDA. Recently we have had groups working on the examples and the appendices to RDA. RDA could not be brought to fruition without the assistance volunteered by many individuals, and the support offered by their institutions.

In the lead up to RDA we also have an RDA Editor and an RDA Project Manager, and also a separate team responsible for the development the product.
Here is a picture of the RDA development team at the last JSC meeting in Chicago in April this year.

In addition to the groups formally represented on the JSC, we also regularly receive input from cataloguing bodies in other countries, such as France, Germany, Italy, Norway and Sweden. This input is extremely valuable in developing RDA to become a more international standard. We hope that these groups will continue to contribute their ideas to RDA’s development. The CoP is considering different possibilities for formalising input from other countries or international groups in the future.

We also receive input to RDA’s development process from other resource description communities. One avenue for this input is through the liaison structure of the American Library Association.
To help us access a range of good ideas during the development phase, we have adopted a very open process in the development of this new standard.

The Editor drafts chapters under JSC direction, the JSC then review these drafts and they are issued for review and comment. The JSC consider the comments they have received, make decisions on the issues raised, and those decisions are then reflected in later drafts. We make the drafts of sections available for comment as they are drafted.

Although this allows us to get valuable input into RDA’s development, there is a very real hazard associated with such an open process. It is quite difficult for those commenting on the draft to grasp the overall picture, as they are only seeing partial drafts. Also, the drafts that are available on the website do not represent the current state of JSC thinking. That must wait until a new draft of a section is issued.

This process can difficult enough to follow for those of us from English speaking communities. It must be doubly hard for those from other language communities, so it is very pleasing to see the high quality of thinking that goes into the responses from other rulemakers.

In the future, after RDA is released, it will continue to be developed and there will be further opportunities for international participation in that development. This will be especially important as we continue with efforts to internationalise the standard.
The JSC receive an almost unimaginable volume of comments on each draft. For example, we received well over 1,000 separate comments on the draft (of Sections 2-4, and 9) which was released in December 2007. The comments covered issues both big and small.

So, what do we do with all these great ideas we receive?

To handle this volume of comments we need to prioritise them. Only around 80 of the high priority comments on these sections were able to be addressed during the JSC meeting in April. Around 200 more were addressed in teleconferences and wiki discussions following the meeting. Even among the high priority issues there are a few issues for which we have not been able to achieve a consensus. There are also very many good ideas amongst those that have not yet been discussed.

There is a saying in English “Great minds think alike”. It is usually said when two people reach the same conclusion at the same time. I believe there are equivalent sayings in many other languages. We do have many great minds working on the issues that we are trying to address in developing RDA, but unfortunately they do not always reach the same conclusion at the same time. And although different individuals or groups may each disagree with a JSC decision, this does not mean that they agree with one another on how to resolve the issue. As Barbara indicated when speaking of the time it took to achieve a single Anglo-American cataloguing standard - achieving consensus is a difficult challenge, but worthwhile nonetheless. It is easy to focus on the differences that remain, and the distance we have yet to travel, but RDA has made the fundamental changes needed to create a truly new standard designed for the digital world.
So where are we now? This slide shows the timeline for developing RDA. In October this year we will release a full draft of RDA, using an early version of the online product. This will offer the opportunity everyone has been waiting for to evaluate the new standard as a whole. Following the review period, comments on that draft will be discussed by the JSC at a March 2009 meeting. The final text should be sent to the publishers before June 2009 and RDA online released soon after.

Four national libraries: the British Library, Library and Archives Canada, the Library of Congress, and the National Library of Australia have committed to the implementation of RDA, and will work together on implementation plans for our countries. This year we will try, as far as possible, to come to a common agreement about the alternatives that we will follow as national libraries. During 2009 we will be preparing our systems and our staff for implementation, as well as assisting with implementation and training plans for our respective countries.

Although implementation of RDA in 2010 will mark the start of a new era, I hope and expect that RDA will then continue to be developed as a standard over the years to come.