



# **Output formats for collection-level descriptions from the SCONE database**

**Report for Work Package B of the JISC CC-interop project**

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## **Executive summary**

This report forms part of deliverable B7 of the COPAC/Clumps Continuing Technical Cooperation project (CC-interop).

Deliverable B7 consists of automated routines to allow the collection-level description (CLD) database of the Scottish Collections Network (SCONE) to be output in various formats.

The formats of interest are those that other UK users of collection descriptions, including the JISC Information Environment, can harvest and use.

There is no single stable format for collection-level descriptions agreed or in use in the United Kingdom, so routines for a number of outputs have been developed:

- Text
- HTML table
- MARC21 display format
- RSLP schema in RDF
- IESR collection schema in XML
- Dublin Core Collection Description schema in RDF

This report also covers the HTML output used to display CLDs in the SCONE services.

During development of the output routines, a number of ambiguities and anomalies in external schema, and in the SCONE database structure, were noted, and recommendations made for resolving them. The recommendations are:

### **For SCONE:**

Further investigation into the structure needed to accommodate categories of access restrictions commonly required by organizations sharing collection-level metadata, and development of the SCONE database structure to improve output for MARC21 and other relevant formats.

Refinement of the SCONE database structure to better accommodate MARC21 name authority headings.

Addition of genre headings as a terminology set to the SCONE database structure.

Development of a method of obtaining URNs for SCONE collection-level descriptions output in RDF format.

Action on the earlier recommendation to establish a mechanism for assigning unique standard identifiers for collections and their locations across the UK and beyond.

Development of the routine to output SCONE descriptions in RSLP format to parse and map Dewey Decimal Classification numbers, if required.

Continuation of monitoring and working with the RSLP schema if it is further developed.

Development of the SCONE database to accommodate the Alternative title attribute and clarification of where title acronyms are to be stored [in RSLP and DC CD].

Amendment of the SCONE education levels to encompass the UKEL set.

### **For JISC**

Consideration of adding an attribute for local identifiers such as shelfmarks to the RSLP schema.

Investigation of the whole issue of collection strength and significance, and the feasibility of creating a set of comparable, coherent, and consistent indicators which can be used by SCONE and other service implementors.

Clarification of the distinction between Physical characteristics, Size, and Format attributes used in the RSLP, DC CD, and IESR profiles.

Clarification of the definitions and relationships of the attributes Rights and Legal status in the RSLP, DC CD, and IESR profiles, and development of the SCONE database to accommodate them if necessary.

Clarification of the definitions and relationships of the attributes Rights and Use rights in the IESR profile, and development of the SCONE database to accommodate them if necessary.

Amendment of the IESR profile to include LCSH encoding of spatial topics.

Clarification in the IESR profile as to restrictions on the occurrence of the usesControlledList attribute.

Clarification of the distinction between Physical characteristics and Size attributes in the DC CD profile, and development of the SCONE database to accommodate them if necessary.

Clarification of the definitions and relationships of the attributes Rights and Legal status in the RSLP, DC CD, and IESR profiles, and development of the SCONE database to accommodate them if necessary.

Clarification in the DC CD profile as to whether Agents as subjects are scoped in the Subject attribute.

## Introduction

This report forms part of deliverable B7 of the COPAC/Clumps Continuing Technical Cooperation project (CC-interop).<sup>1</sup>

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There is no single stable format for collection-level descriptions agreed or in use in the United Kingdom, so routines for a number of outputs have been developed:

- Text
- HTML table
- MARC21 display format
- RSLP schema in RDF
- IESR collection schema in XML
- Dublin Core Collection Description schema in RDF

The first two of these are based directly on the schema used by SCONE, and the last three on the RSLP schema which itself is derived from the same underlying model used by SCONE.

This report also covers the HTML output used to display CLDs in the SCONE services. The formats are discussed in more detail later in this report.

It should be noted that the SCONE database is also used to produce the annual printed directory *Scottish library and information resources*<sup>2</sup> on behalf of the Chartered Institute of Library and Information Professionals in Scotland. This output does not involve Collection entities, however, as it is a directory of library locations and contacts, and is excluded from the scope of this report.

## SCONE database schema

The SCONE database schema is based on the entity-relationship analysis of *An Analytic model of collections and their catalogues* by Michael Heaney.<sup>3</sup> The schema has been revised and extended to take into account the work of subsequent collection description projects and services, as part of deliverables B1 and B2 of CC-interop.<sup>4</sup> This work has added attributes not specified in Heaney's analysis, and identified data elements for storing attribute details.

The principal entities used in the schema are:

- Collection.
- Location.
- Agent.

There are two types of Location, electronic and physical, and two types of Agent, organizational and personal.

The schema accommodates relationships between entities. Agent-Collection relationships include Collects, Owns, and Produces, amongst others. There is only one Agent-Location relationship, Administers, and one Location-Collection relationship, Locates.

Collection-Collection relationships include Contains, for hierarchical sub- and super-collections. A special type of Collection-Collection relationship is Describes, where one of the entities must be of type "Collection" and the other of type "Catalogue". Further information about the treatment of catalogues is given below.

Several relationships in the schema contain attributes (and sub-attributes) specific to the relationship itself rather than either of the related entities. These relationships include Collects, Owns, and Administers.

The detailed contents of these three entities (Collection, Location, Agent) and three relationships (Collects, Owns, Administers) are common to most collection description schemas. Their attributes are used in the table later in this report to indicate the broad scope of the output formats.

Further details of the SCONE database schema are available from the *SCONE data dictionary*<sup>5</sup> and *Guide to the SCONE database*<sup>6</sup>, both part of the SCONE service. Further information is also available from *Collection-level descriptions in the Scottish Collections Network (SCONE)*<sup>7</sup>, the manual published as part of deliverable B6 of CC-interop.

## Catalogues

An analytic finding-aid for a collection, such as a library catalogue, is treated as a collection of metadata records, and is recorded in the database as a collection-level description in its own right.

Such descriptions cannot be directly accessed in the SCONE service. There is always a collection-level description for the corresponding collection, and the service is designed for the retrieval and identification of collections of resources rather than the catalogues which describe them. Instead, information about the catalogue is extracted from its collection-level description for inclusion in the display for the collection that it describes.

However, collection-level descriptions for catalogues can be output like every other description in the SCONE database.

## Use

Output of collection-level descriptions for catalogues can be used for compiling printed or digital directories or listings of finding-aids.

The HTML, RSLP, IESR, and DC CD formats can be used to include information about catalogues in portals.

## Examples

Edinburgh University Library catalogue: Listing 10; Listing 11 with Screen 7, Listing 12, Listing 13.

## MARC21 format and the National Library of Scotland

The Confederation of Scottish Mini Co-operatives (CoSMiC)<sup>8</sup> receives a report on developments in SCONE at its regular meetings. The representative of the National Library of Scotland (NLS) mentioned in late 2003 that they had decided to create collection-level records for inclusion in their main catalogue. Three reasons were given:

- To provide cost-effective control for low-priority items such as collections of ephemera.
- To provide temporary control for unprocessed collections awaiting full item-level cataloguing.
- To highlight shared characteristics of a collection.

The records are required in MARC21 format for interoperability with item-level cataloguing. SCONE has recorded many of the NLS collections using information from the NLS website, so the National Library of Scotland agreed to work with the CC-interop project to output SCONE records in this format. Additional factors supporting this decision are that SCONE employs many content standards also used by the NLS, including Library of Congress Subject Headings and Library of Congress Name Authority File. SCONE already contains records for many of the NLS collections, taken from the special collections section of the NLS website, as a consequence of NLS participation via the Scottish Confederation of University and Research Libraries (SCURL) in the original CAIRNS<sup>9</sup> and SCONE<sup>10</sup> projects, so there was an available set of data for use in testing.

Following a discussion with the NLS, and the receipt of relevant internal NLS documentation, a routine was developed for outputting SCONE records for NLS collections in MARC21 display format.

A sample of six SCONE records was used to test the routine.

The MARC21 display format records were then converted to MARC21 exchange records using a software tool. The exchange records were sent to the NLS by email, and subsequently loaded into a test account of the NLS Voyager library management system to ensure the structure was correct and there were no machine interoperability problems.

Further details of the output format and its processing are given in the MARC21 section of this report.

Listings and screen shots in the appendix show a complete cycle of formats, from NLS website to NLS catalogue via SCONE, of the test record for the Robert McKinlay Boswellian collection:

Screen 1	National Library of Scotland website.	
Screen 2	SCONE service website.	
Listing 3	MARC21 display format.	
Listing 4	MARC21 exchange format.	
Screen 4	National Library of Scotland catalogue MARC record.	
Screen 5	National Library of Scotland catalogue full record.	

The collaborative work with the NLS is ongoing. Future activity is planned to:

- Amend the structure of the SCONE database to accommodate all of the sub-attributes required for a full LC Name Authority File heading. Several types of extension to personal name are conflated in SCONE, but there are no specific reasons why fields cannot be added to distinguish these types without affecting the SCONE service or other output formats.
- Develop a further refinement of access conditions. SCONE currently splits access conditions into categories such as opening hours and requirements for notification, and it is likely that greater flexibility for output can be developed by looking at the requirements of the MARC format.
- Investigate the feasibility of NLS staff maintaining their collection-level records using the SCONE updating interface, or importing NLS MARC21 records into the SCONE database.

## Technical infrastructure

SCONE uses Microsoft SQL Server as its relational database management system.

Data is extracted from the database using Transact-SQL statements.

Output formats for collection-level descriptions from the SCONE database

Formatting and punctuation is added and output written to file using Macromedia ColdFusion Markup Language (CFML).

All output is written to text files.

## Scope of output formats

This table indicates which attributes are mapped in the output formats from the SCONE database, to allow comparison of the scope of the various schemas catered for.

SCONE does not map to certain schema attributes, such as Subject strength, for reasons given in this report, and these are omitted from the table.

Detail attributes for Agents, such as telephone number, are not included in the SCONE display mapping because they are available via hyperlinks from the display. They have not been output in the Text and HTML mappings in order to keep the format simple.

Entity/Relationship/Attribute	SCONE	Text	HTML	MARC	RSLP	IESR	DCCD
<b>Collection</b>							
Audience/Education level							
Content: Sound material: Language							
Content: Text: Language							
Date range: Publication							
Date range: Accumulation							
Description							
Identifier							
Local identifier							
Notes							
Physical characteristics							
Subject: Concept/keywords							
Subject: Date coverage							
Subject: Name							
Subject: Place coverage							
Subject scheme**							
System of arrangement							
Title							
Type							
<b>[Transactions]</b>							
Administrative history							
<b>Catalogues</b>							
Title/Identifier/URL							
<b>Related collections</b>							
Title/Identifier/URL							
<b>Related publications</b>							
Title/Identifier/URL							
<b>Agent.Collector (Organization)</b>							
Administrative history							
Email address							
Fax number							
Name/Identifier/URL							
Telephone number							
<b>Agent.Collector (Person )</b>							
Biography							
Date							
Email address							
Fax number							
Name/Identifier/URL							
Telephone number							
<b>Agent.Collects:Collection</b>							
Accrual policy							
Legal status							

<b>Agent.Owner (Organization)</b>							
Email address							
Fax number							
Logo							
Name/Identifier/URL							
Telephone number							
<b>Agent.Owner (Person )</b>							
Date							
Email address							
Fax number							
Name/Identifier/URL							
Telephone number							
<b>Agent.Owns:Collection</b>							
Access control							
Legal status							
<b>Agent.ItemCreator (Organization)</b>							
Name/Identifier/URL							
<b>Agent. ItemCreator (Person )</b>							
Date							
Name/Identifier/URL							
<b>Location (Electronic)</b>							
Name/Identifier/URL							
<b>Location (Physical)</b>							
Name/Identifier/URL							
Place (Address)							
<b>Agent.Administrator (Organization)</b>							
Name/Identifier/URL							
<b>Agent.Administrator (Person )</b>							
Name/Identifier/URL							
<b>Agent:Administers:Location</b>							
Access conditions							

## Output formats

The following output formats have been developed for SCONE:

- SCONE display format in HTML
- Text
- HTML table
- MARC21 display format
- RSLP schema in RDF
- IESR collection schema in XML
- Dublin Core Collection Description schema in RDF

Output files for a SCONE collection-level description can be automatically generated by specifying the Collection record identifier, output format, and file name.

These output formats can be used in turn to derive a number of other formats, as described below.

## **Scone display format**

The SCONE service display of a collection-level description includes most of the attributes of the Collection and Location, and relationship attributes relevant to collection and location access.

Detail attributes for related Agent and Collection entities are available by following hyperlinks from the identification elements.

Hyperlinks to related super-collections, sub-collections, and catalogues are provided from graphical buttons as well as identification elements.

Groups of display elements can be suppressed by the user to simplify the CLD. These groups are:

- General description
- Administrative history
- Location
- Related persons and organizations
- Related collections
- Subjects
- Catalogues

## **Use**

The format is used in the SCONE service, and services using the same database schema.

## **Examples**

Robert McKinlay Boswellian collection: Screen 2.  
MacColl and Seeger collection: Screen 8.

## **Text format**

The text format output for the SCONE collection-level description includes most of the attributes of the Collection and Location, and relationship attributes relevant to collection and location access.

Each type of attribute is held in a separate line, with multiple instances separated by a semicolon.

Each line commences with the attribute label, separated by a colon and space from the subsequent identification and detail elements.

There is no other formatting except for simple punctuation.

## **Use**

The format is intended for use in printed guides and directories and digital surrogates.

There is sufficient structure to allow global deletion of unwanted attributes, using the label and end-of-line marker as delimiters.

Complete attributes can be cut-and-pasted into other applications in a single action.

## **Examples**

Robert McKinlay Boswellian collection: Listing 1.  
Edinburgh University Library collection. Listing 8.  
Edinburgh University Library catalogue. Listing 10.  
MacColl and Seeger collection. Listing 14.

## HTML table format

The HTML table format output for the SCONE collection-level description includes most of the attributes of the Collection and Location, and relationship attributes relevant to collection and location access.

Each attribute is held in a separate row of an HTML table.

Multiple instances of the same type of attribute are held in separate rows.

The first column of each row contains the attribute label. The second column contains the identification and detail elements of the attribute.

URLs for electronic locations of the collection and related catalogues are marked-up as hyperlinks attached to collection titles.

There is no other formatting in the content except for simple punctuation.

The HTML table is marked-up with no tag qualifiers except for top vertical alignment of cells.

The output format is not an HTML document. It is the mark-up for an HTML table only, and does not include any document tags. The output can be displayed by inserting it into the <body> tags of an HTML document.

## Use

The format is intended for use in local websites.

It can be incorporated into an existing HTML document or template by cut-and-paste in a single action.

Duplicate attribute labels can be removed by simple editing if necessary.

There is sufficient structure to allow global deletion of unwanted attributes, using the label and HTML row tags as delimiters.

## Examples

Robert McKinlay Boswellian collection: Listing 2 with Screen 3.  
Edinburgh University Library collection: Listing 9 with Screen 6.  
Edinburgh University Library catalogue: Listing 11 with Screen 7.

## MARC21 format

The MARC21 format output for the SCONE collection-level description includes many of the attributes of the Collection, and relationship attributes relevant to collection access.

The content is based on *Guidelines for creating collection-level records in the main catalogue*<sup>11</sup> from the *National Library of Scotland Cataloguing Services manual*. These guidelines themselves are based on *Collection-level cataloging* from the Library of Congress.<sup>12</sup>

The format conforms to the MARC 21 concise format for bibliographic data standards.<sup>13</sup>

### Variations in content standards

It is not possible to accurately map SCONE data to all relevant fields in the MARC21 format because the SCONE schema is not detailed enough in some areas.

The MARC21 schema records information about access restrictions in two fields, 506 and 540, with many subfields and standard content, whereas SCONE uses one field without internal structure or content standards.

**Recommendation:** Further investigation into the structure needed to accommodate categories of access restrictions commonly required by organizations sharing collection-level metadata, and development of the SCONE database structure to improve output for MARC21 and other relevant formats.

The SCONE structure for personal names does not accommodate some specific additions to names required by MARC21, although general additions are stored.

**Recommendation:** Refinement of the SCONE database structure to better accommodate MARC21 name authority headings.

SCONE does not accommodate the genre headings required for MARC21 field 655.

**Recommendation:** Addition of genre headings as a terminology set to the SCONE database structure.

### Local variations

The current SCONE output includes two elements local to the National Library of Scotland:

- Tag 040: the code indicates the original cataloging agency. This tag is only used by agencies registered in the MARC Code List for Organizations.<sup>14</sup>
- Tag 594: the entire tag and contents are for local use, and are optional.

### Syntax

The syntax of the format conforms to the *Mnemonic file format* of the MarcBreaker tool of MarcEdit.<sup>15</sup> MarcEdit is a free software package for editing and formatting catalogue records in the MARC21 format. It is used by the National Library of Scotland and the Centre for Digital Library Research.

The Mnemonic file format allows a MARC21 record to be edited using the in-built MarcEditor tool or any other text editor. It is an example of a MARC display format.

The MarcMaker tool of MarcEdit can reformat any record in the Mnemonic file format to MARC21 exchange format.<sup>16</sup>

## Use

The MARC21 exchange format can be used in a variety of shared cataloguing and user environments, including:

- Library management systems.
- Cooperative bibliographic cataloguing networks and physical union catalogues.
- Z39.50 servers and distributed union catalogues.

The exchange format can be mapped to XML and thence to a number of other standard formats using XLSL. MarcEdit provides tools to output MARC21 records in the formats:

- Dublin Core.<sup>17</sup>
- Encoded Archival Description (EAD).<sup>18</sup>
- Metadata Object Description Schema (MODS).<sup>19</sup>
- Open Archives Initiative (OAI) Dublin Core.<sup>20</sup>

## Examples

Robert McKinlay Boswellian collection: Listing 3 with Screens 4 and 5.

## RSLP format

The RSLP format output for the SCONE collection-level description includes most of the attributes of the Collection, Location, and Administrator, Collector and Owner agents, and relationship attributes relevant to collection and location access.

The format conforms to the RSLP schema.<sup>21</sup> Additional information on interpreting the schema and creating the correct output was taken from the associated Data entry guidelines<sup>22</sup> and Tool<sup>23</sup>.

## Variations in content standards

The Tool automatically assigns URNs to the collection-level description components it generates, including the collection, location, collector, owner, and administrator entities. The RDF output from the Tool places the URNs in “rdf:resource” and “rdf:about” qualifiers. The SCONE output creates a unique name for entities based on the primary keys of the tables where they are stored.

**Recommendation:** Development of a method of obtaining URNs for SCONE collection-level descriptions output in RDF format.

The executive summary of the Extending the SCONE collection descriptions database for CC-interop report<sup>24</sup> includes the recommendation that “Urgent consideration be given to establishing a means of assigning unique, standard identifiers to Collections and Locations” and points out that “Without such a mechanism, interoperability of locally-created descriptions in a global service will be severely impaired”. The SCONE database structure accommodates two collection identifiers, one locally-assigned and the other intended for the globally unique identifier. The unique identifier field is not currently used while awaiting the development of an assignment mechanism.

The SCONE RSLP format creates a unique identifier based on the primary key for the instance row in the Collection table as the RSLP **Identifier**

**Recommendation:** Action on the earlier recommendation to establish a mechanism for assigning unique standard identifiers for collections and their locations across the UK and beyond.

The RSLP Data entry guidelines state that “Internal, library or archival, identifiers can be given here” for the Identifier attribute, but the RSLP schema states that this attribute contains a “formal identifier for the collection”. Since internal identifiers may be assigned and used informally, and there are no mechanisms to avoid duplication in identifiers used by different organizations, there may be conflict between these statements. There is no specific accommodation in the RSLP schema for a local identifier.

**Recommendation:** Consideration of adding an attribute for local identifiers such as shelfmarks to the RSLP schema.

SCONE does not output the RSLP schema attribute **Collection strength**. Relevant information is held in several different places within the SCONE database:

- Free-text statements of general and specific indicators of collection strength and significance are embedded within the Collection.Description field. Most of these statements are supplied by the organizations holding the collections, but a significant number of them emanate from the user group the Scottish Local History Forum via the Exploring Scottish history directory which has been incorporated into SCONE. The statements vary considerably in scope, content, and purpose, and are difficult to extract automatically from the rest of the description.

- Conspectus subject strengths for general collections are incorporated in the rich structure of the Research Collections Online service<sup>25</sup> which lies behind the SCONE service option for retrieving collections by subject strength.
- Other indicators of strength are given by the LCSH headings and DDC numbers assigned to collections.

This is a complex area requiring further investigation. No attempt has been made to map the Conspectus strengths because in most cases it would result in an output considerably exceeding the length of the rest of the record.

**Recommendation:** Investigation of the whole issue of collection strength and significance and the feasibility of creating a set of comparable, coherent, and consistent indicators which can be used by SCONE and other service implementors.

SCONE does not output the Dewey Decimal Classification number to the RSLP attribute for concept (subject topic) because it outputs the LCSH topical heading instead. The DDC number would also have to be parsed to identify to which of the RSLP **Subject** attributes (concept, object, place, and time) it should be output.

**Recommendation:** Development of the routine to output SCONE descriptions in RSLP format to parse and map Dewey Decimal Classification numbers, if required.

The SCONE database accommodates components of the attribute **Access control** in the Owns relationship, in line with Heaney's analytic model. This allows multiple instances of the attribute when there are multiple owner Agents. For example, access charges may vary between owners if they offer different added-value services. In order to preserve the link between status and collector, the name of the owner Agent is added to the attribute for output of multiple instances.

The SCONE database accommodates the attribute **Accrual status** in the Collects relationship, in line with Heaney's analytic model. This allows multiple instances of the attribute when there are multiple collector Agents. For example, the accrual status of a historical collector will be closed, whereas the status of the current collector may be open. In order to preserve the link between status and collector, the name of the collector Agent is added to the attribute for output of multiple instances.

The SCONE database accommodates the attribute **Legal status** in the Owns relationship, in line with Heaney's analytic model. This allows multiple instances of the attribute when there are multiple owner Agents. In order to preserve the link between status and owner, the name of the owner Agent is added to the attribute for output of multiple instances.

The SCONE database accommodates the attribute **Access conditions** in the Administers relationship, in line with Heaney's analytic model. This allows multiple instances of the attribute when there are multiple Agents administering the location of a the collection. For example, the collection of a local history society may be administered by several members who have agreed to supervise access at different times during the week. In order to preserve the link between conditions and administrator, the name of the administering Agent is added to the attribute for output of multiple instances.

## Use

The RSLP schema is used by a number of collection-level description services in the United Kingdom, including Collections Wales<sup>26</sup> and RASCAL<sup>27</sup> which are SCONE-type services for Wales and Northern Ireland respectively.

However, as noted in the background information supplied for break-out sessions at the Collection Description Schema Forum held in London on 12 February 2004, "many implementations are using RSLP elements as the basis of their individual schema and then extending/modifying it".<sup>28</sup> Although the SCONE database structure has been extended to

take into account some of these modifications as a result of the work carried out CC-interop deliverables B1 and B2, the RSLP schema itself has not been amended. As a result, the SCONE RSLP format does not output any of these additional elements even if the database stores them. The recommendations of the Forum imply that the RSLP schema should be developed to reflect the needs of implementors, which may result in the addition of new elements.<sup>29</sup>

**Recommendation:** Continuation of monitoring and working with the RSLP schema if it is further developed.

## Examples

Robert McKinlay Boswellian collection: Listing 5.

## IESR format

The Information Environment Services Registry format output for the SCONE collection-level description includes most of the attributes of the Collection, and relationship attributes relevant to collection access.

The format conforms to the IESR application profile<sup>30</sup>. Additional information has been taken from the associated data entry guidelines<sup>31</sup>.

The Profile is intended for the creation of simple collection-level descriptions, primarily for digital collections, and uses a sub-set of the RSLP schema attributes with a small number of additions.

### Variations in content standards

The **Identifier** attribute is clearly defined as a globally unique identifier in the IESR application profile. The SCONE RSLP format creates a unique identifier based on the primary key for the instance row in the Collection table. As with the RSLP format, there is no accommodation for a local identifier in the IESR format.

The **Alternative title** attribute is not accommodated in the SCONE database. The IESR data entry guidelines suggest that acronyms can be stored in this attribute, or the **Title** attribute.

**Recommendation:** Development of the SCONE database to accommodate the Alternative title attribute and clarification of where title acronyms are to be stored.

The **Format** attribute contains the SCONE statement of the number and type of items constituting the collection. This contrasts with the output for the DC CD format which is mapped to the Size attribute instead. The IESR profile gives a very broad definition of the attribute, whereas DC CD splits it into Physical characteristics and Size but does not clarify the differences between them. SCONE therefore outputs the same data to the dc:format attribute in RSLP and IESR formats, but to the dcterms:extent attribute in the DC CD format, leaving dc:format blank, which causes an interoperability problem.

**Recommendation:** Clarification of the distinction between Physical characteristics, Size, and Format attributes used in the RSLP, DC CD, and IESR profiles.

SCONE outputs the attribute **Access rights**, but does not map to the more general attribute **Rights**. The application profile gives narrow definitions for each: the former is “licence requirements to access the collection” and uses a controlled list; the latter is “a copyright statement about the collection”. It is possible that the attribute **Legal status** in SCONE (based on the RSLP attribute) should map to **Rights**, but there is insufficient definition to determine this.

**Recommendation:** Clarification of the definitions and relationships of the attributes Rights and Legal status in the RSLP, DC CD, and IESR profiles, and development of the SCONE database to accommodate them if necessary.

SCONE does not output anything to the attribute **Use rights**. The profile defines this as “a statement about allowed usage of data from the collection, for example terms and conditions”, but this overlaps with the definition of the **Access rights** attribute as presumably a license includes terms and conditions.

**Recommendation:** Clarification of the definitions and relationships of the attributes Rights and Use rights in the IESR profile, and development of the SCONE database to accommodate them if necessary.

SCONE outputs only collection and location data to the attribute **hasService**, defined as the global identifier of a service providing access to the collection. This attribute is used to link collection-level descriptions with descriptions of services such as Z39.50 access to the

collection metadata. Although the SCONE database stores elements of service descriptions for the CAIRNS clump, producing an output for Service entities is beyond the scope of this report. However, the URIs of catalogues and locations are output.

The IESR attribute **Logo** is defined as the URI of the logo of the collection or agent, but the type of agent is not defined. The IESR data entry guidelines only refer to logos for collections. SCONE does not accommodate collection logos, but does store data about the logos of organization agents irrespective of their being collectors, owners, or administrators. SCONE outputs the logo of organization Owner agents to this attribute, but not of any other agent type to avoid confusion.

SCONE outputs geographic topics from LCSH to the **Spatial** attribute, but LCSH is not specified in the list of encoding schemes although it is given in the list for the **Subject** attribute.

**Recommendation:** Amendment of the IESR profile to include LCSH encoding of spatial topics.

SCONE outputs a code indicating the classification and subject indexing schemes used by the catalogue of a collection to the **usesControlledList** attribute. SCONE uses the attribute **System of arrangement** to accommodate information about how physical and electronic items in a collection are arranged at their location, but this is not necessarily the same as the way item metadata is used for browsing or searching in the catalogue. For example, a collection of digital documents may be arranged in broad subject categories, whereas its metadata may use a detailed scheme such as LCSH.

The IESR profile does not indicate that this attribute should be restricted to collections of metadata (as an analytic finding-aid); that is, the attribute should only be used if the **Type** attribute indicates a catalogue. This may lead to ambiguity in the contents of the **usesControlledList** attribute.

**Recommendation:** Clarification in the IESR profile as to restrictions on the occurrence of the **usesControlledList** attribute.

SCONE currently uses the six broadest Metadata in Education Group education levels, and these are output to the IESR attribute **educationLevel**. The profile indicates that the levels should be taken from the UK Education Levels list<sup>32</sup>, which directly correspond to Scottish educational needs, and are at a finer level of granularity than the original MEG set.

**Recommendation:** Amendment of the SCONE education levels to encompass the UKEL set.

SCONE maps the ID numbers of super-collections to the **isPartOf** attribute, but there is no accommodation in the IESR profile for sub-collections.

SCONE does not output references to catalogues to the **hasAssociation** attribute, as this is restricted in the profile to “association by provenance”. These are output to the **hasService** attribute instead.

SCONE does not output anything to the attribute **admata**, which is defined for internal use by IESR.

## Use

The IESR collection-level description is intended for use in the JISC Information Environment in conjunction with descriptions of services. The schema caters for digital collections and associated services only.

## **Examples**

Robert McKinlay Boswellian collection: Listing 6.  
Edinburgh University Library catalogue: Listing 12.

## DC CD format

The Dublin Core Collection Description format output for the SCONE collection-level description includes most of the attributes of the Collection, and relationship attributes relevant to collection access.

The format conforms to the Dublin Core Collection Description Application Profile.<sup>33</sup>

The Profile is intended for the creation of simple collection-level descriptions, and uses a subset of the RSLP schema attributes with a small number of additions.

The DC CD Working Group has not yet published recommendations for syntax, and there may be inaccuracies in the current SCONE mapping which will be corrected in due course.

## Variations in content standards

The **Identifier** attribute is clearly defined as a globally unique identifier in the DC CD AP. The SCONE RSLP format creates a unique identifier based on the primary key for the instance row in the Collection table. As with the RSLP format, there is no accommodation for a local identifier in the DC format.

The **Alternative title** attribute is not accommodated in the SCONE database. There is a potential clash with the comments for the Title attribute in the AP and the RSLP schema, where it is suggested title acronyms be included in that attribute.

**Recommendation:** Development of the SCONE database to accommodate the Alternative title attribute and clarification of where title acronyms are to be stored.

There is no output from SCONE to the **Physical characteristics** attribute. The SCONE database stores a statement of the number and type of items constituting the collection, and it is not possible to parse it to separate the number, which is required for the AP **Size attribute**, from the type. The SCONE attribute is more appropriately mapped to the Size attribute.

**Recommendation:** Clarification of the distinction between Physical characteristics and Size attributes in the DC CD profile, and development of the SCONE database to accommodate them if necessary.

The SCONE database stores the three-letter language code of ISO-639 part 2.<sup>34</sup> It does not store any of the two-letter code variations, and therefore does not follow the recommendations in the comments of the AP that the two-letter code should be output to the **Language** attribute in preference to the three-letter code.

SCONE outputs the attribute **Access rights**, but does not map to the more general attribute **Rights**. The application profile indicates that the former refines the latter. It is possible that the attribute **Legal status** in SCONE (based on the RSLP attribute) should map to **Rights**, but there is insufficient definition to determine this.

**Recommendation:** Clarification of the definitions and relationships of the attributes Rights and Legal status in the RSLP, DC CD, and IESR profiles, and development of the SCONE database to accommodate them if necessary.

The **Audience** attribute is mapped from the SCONE Education level attribute.

The SCONE database does not accommodate the AP attribute **Logo** for an image or logo associated with the collection, although it does accommodate an attribute for the logo of an organization Agent. The AP attribute is therefore not output from SCONE.

The **Subject** attribute is output from LCSH and DDC attributes, and subject Agent names in Library of Congress Name Authority File format, although it is not clear from the AP whether subject Agents are scoped for this attribute.

**Recommendation:** Clarification in the DC CD profile as to whether Agents as subjects are scoped in the Subject attribute.

The SCONE database structure accommodates dates in the **Accumulation date range** and **Contents date range** attributes only as years.

Personal names in the attributes **Creator** and **Owner** are output in direct order, and not normalized. If required, the SCONE DC CD format can be developed to output personal names in normalized form, with surname first.

The SCONE database accommodates the attribute **Accrual status** in the Collects relationship, in line with Heaney's analytic model. This allows multiple instances of the attribute when there are multiple collector Agents. For example, the accrual status of a historical collector will be closed, whereas the status of the current collector may be open. In order to preserve the link between status and collector, the name of the collector Agent is added to the attribute for output of multiple instances.

Where the SCONE collection is a finding-aid or catalogue, the name of the collection described is output to the AP **Associated collection** attribute.

## Use

The format is intended for use in conjunction with other DCMI schemas for developing services which use metadata derived from a wide range of heterogeneous sources and formats.

## Examples

Robert McKinlay Boswellian collection: Listing 7.  
Edinburgh University Library catalogue. Listing 13.

## Appendices: screenshots and listings

The following screenshots and listings illustrate aspects of the various output formats and allow them to be compared.

All screenshots are taken from the SCONE service or individual HTML files, using MS Internet Explorer as the browser.

All listings are taken from the output text files.

		Page
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Listing 10	Edinburgh University Library catalogue. Text format.	53
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Listing 12	Edinburgh University Library catalogue. IESR format.	57
Listing 13	Edinburgh University Library catalogue. DC CD (RDF) format.	58
Listing 14	MacColl and Seeger collection. Text format.	60

## Screen 1

### Robert McKinlay Boswellian collection

#### National Library of Scotland website

##### **ROBERT MCKINLAY BOSWELLIAN COLLECTION**

A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a member of Glasgow Bibliographical Society with a particular interest in the lesser-known works of James Boswell. The collection includes a volume of cuttings relating to McKinlay's bibliographical research and his correspondence with noted Boswell scholars such as Frederick Pottle.

Shelf: F.7.a.23 - F.7.b.12

This shows part of the web page of the "R" section of the *Special and named printed collections in the National Library of Scotland – Browse* part of the National Library of Scotland website.<sup>35</sup>

This information formed the basis of the SCONE CLD.

The description and history paragraph is assigned to the Collection.Description attribute.

The finding-aid note is assigned to the Collection.Notes attribute. There is insufficient information to create a Collection-Description (Catalogue) entity to hold the note. The National Library of Scotland is digitizing many of its printed and manuscript finding-aids, and this note is likely to be replaced in due course.

The shelfmark is assigned to the Collection.Local-Identifier attribute.

Information from the description was then used to create collector, item creator, and subject Agent entities related to the collection, and historic owner Agent entities related to its administrative history.

This Collection entity has a super-collection relationship with that for the main collection of the National Library of Scotland.

## Screen 2

### Robert McKinlay Boswellian collection

#### SCONE service website

[Home](#)

## Robert McKinlay Boswellian collection

[Help](#)

[Online Catalogues](#)

[Super Collections](#)

<b>Description</b>	A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a member of Glasgow Bibliographical Society with a particular interest in the lesser-known works of James Boswell. The collection includes a volume of cuttings relating to McKinlay's bibliographical research and his correspondence with noted Boswell scholars such as Frederick Pottle.			
<b>Size</b>	17 items			
<b>Local identifier</b>	F.7.a.23 - F.7.b.12			
<b>Type</b>	Collection.Library			
<b>Administrative history</b>	<b>Date</b>	<b>Transferred from</b>	<b>To</b>	<b>Terms</b>
	1934	Rev Robert McKinlay	National Library of Scotland	Sale.
<b>Location</b>	National Library of Scotland George IV Bridge <a href="#">Edinburgh</a> (City of Edinburgh, Scotland) EH1 1EW  City centre location, Waverley rail station, bus station nearby; on bus routes; parking nearby; disabled access.			
<b>Access</b>	Direct access is limited to specific groups.			
<b>Contacts</b>	<a href="#">National Library of Scotland</a>			
<b>Collectors</b>	<a href="#">Rev Robert McKinlay</a> [Accrual: policy is Closed; periodicity is Closed; method is Purchase]			
<b>Item creators</b>	<a href="#">James Boswell (1740-1795)</a>			
<b>Owners</b>	<a href="#">National Library of Scotland</a>			
<b>Subjects</b>	<a href="#">James Boswell (1740-1795)</a>			
<b>Part of</b>	<a href="#">National Library of Scotland collection (main)</a>			
<b>Catalogues</b>	<a href="#">National Library of Scotland WebPAC</a>			

This shows the web page for the collection-level description for the Robert McKinlay Boswellian collection in the SCONE service.

This is the full display with all elements.

(cont.)

## **Screen 2 (cont.)**

### **Robert McKinlay Boswellian collection**

#### **SCONE service website**

Agent names are hyperlinked to detail pages. With the exception of administrator agents (labelled Contacts in the display), the detail pages also include a list of all collections related to the agent.

The Location town name is hyperlinked to a page listing all collections with the same town name.

The super-collection title (labelled Part of) is hyperlinked to its collection-level description. The same hyperlink is available on the graphic button at the top of the page.

The catalogue title is hyperlinked to its homepage. The same hyperlink is available on the graphic button at the top of the page.

The web page is generated dynamically from the SCONE database using Macromedia ColdFusion.

## Listing 1

### Robert McKinlay Boswellian collection

#### Text format

(c) SLIC/CDLR and contributing organizations  
Not to be reproduced without permission  
Title: Robert McKinlay Boswellian collection.  
Description: A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a member of Glasgow Bibliographical Society with a particular interest in the lesser-known works of James Boswell. The collection includes a volume of cuttings relating to McKinlay's bibliographical research and his correspondence with noted Boswell scholars such as Frederick Pottle.  
Physical characteristics: 17 items.  
Local identifier: F.7.a.23 - F.7.b.12.  
Type: Collection.Library  
Administrative history: 1934: Transferred from Rev Robert McKinlay to National Library of Scotland by sale.  
Location address: National Library of Scotland, George IV Bridge, Edinburgh, EH1 1EW, City of Edinburgh, Scotland.  
Transportation note: City centre location, Waverley rail station, bus station nearby; on bus routes; parking nearby; disabled access.  
General access: Direct access is limited to specific groups.  
Collector: Rev Robert McKinlay (Accrual: policy is Closed; periodicity is Closed; method is Purchase).  
Item creator: James Boswell (1740-1795).  
Owner: National Library of Scotland.  
Subject: James Boswell (1740-1795).  
Is part of: National Library of Scotland collection (main).  
Catalogue: National Library of Scotland general collections catalogue (<http://www.nls.uk/catalogues/online/index.html>).

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in text format.

## Listing 2

### Robert McKinlay Boswellian collection

#### HTML format

```

<!-- (c) SLIC/CDLR and contributing organizations -->
<!-- Not to be reproduced without permission -->
<table>
<tr>
<td valign="top">
Title
</td>
<td valign="top">
Robert McKinlay Boswellian collection
</td>
</tr>
<tr>
<td valign="top">
Description
</td>
<td valign="top">
A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were
purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of
Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo,
then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT
Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular
Greek") he was also a member of Glasgow Bibliographical Society with a particular interest
in the lesser-known works of James Boswell. The collection includes a volume of cuttings
relating to McKinlay's bibliographical research and his correspondence with noted Boswell
scholars such as Frederick Pottle.
</td>
</tr>
<tr>
<td valign="top">
Size, etc.
</td>
<td valign="top">
17 items
</td>
</tr>
<tr>
<td valign="top">
Local identifier
</td>
<td valign="top">
F.7.a.23 - F.7.b.12
</td>
</tr>
<tr>
<td valign="top">
Type
</td>
<td valign="top">
Collection.Library
</td>
</tr>
[...]
```

## Listing 2 (cont.)

### Robert McKinlay Boswellian collection

#### HTML format

```
[...]
<tr>
<td valign="top">
Administrative history
</td>
<td valign="top">
1934: Transferred from Rev Robert McKinlay to National Library of Scotland by sale.
</td>
</tr>
<tr>
<td valign="top">
Location address
</td>
<td valign="top">
National Library of Scotland, George IV Bridge, Edinburgh, EH1 1EW, City of Edinburgh,
Scotland
</td>
</tr>
<tr>
<td valign="top">
Transportation note
</td>
<td valign="top">
City centre location, Waverley rail station, bus station nearby; on bus routes; parking
nearby; disabled access.
</td>
</tr>
<tr>
<td valign="top">
Access
</td>
<td valign="top">
Direct access is limited to specific groups.
</td>
</tr>
<tr>
<td valign="top">
Collector
</td>
<td valign="top">
Rev Robert McKinlay (Accrual: policy is Closed; periodicity is Closed; method is Purchase)
</td>
</tr>
<tr>
<td valign="top">
Item creator
</td>
<td valign="top">
James Boswell (1740-1795)
</td>
</tr>
[...]
```

## Listing 2 (cont.)

### Robert McKinlay Boswellian collection

#### HTML format

```
[...]
<tr>
<td valign="top">
Owner
</td>
<td valign="top">
National Library of Scotland
</td>
</tr>
<tr>
<td valign="top">
Subject
</td>
<td valign="top">
James Boswell (1740-1795)
</td>
</tr>
<tr>
<td valign="top">
Is part of
</td>
<td valign="top">
National Library of Scotland collection (main)
</td>
</tr>
<tr>
<td valign="top">
OPAC
</td>
<td valign="top">
<a href='http://www.nls.uk/catalogues/online/index.html'>National Library of Scotland
general collections catalogue</a>
</td>
</tr>
</table>
```

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in HTML format as a table.

Screen 3 shows a simple web page display using this listing.

## Screen 3

### Robert McKinlay Boswellian collection

#### HTML display

Title	Robert McKinlay Boswellian collection
Description	A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a member of Glasgow Bibliographical Society with a particular interest in the lesser-known works of James Boswell. The collection includes a volume of cuttings relating to McKinlay's bibliographical research and his correspondence with noted Boswell scholars such as Frederick Pottle.
Size, etc.	17 items
Local identifier	F.7.a.23 - F.7.b.12
Type	Collection.Library
Administrative history	1934: Transferred from Rev Robert McKinlay to National Library of Scotland by sale.
Location address	National Library of Scotland, George IV Bridge, Edinburgh, EH1 1EW, City of Edinburgh, Scotland
Transportation note	City centre location, Waverley rail station, bus station nearby; on bus routes, parking nearby; disabled access.
Access	Direct access is limited to specific groups.
Collector	Rev Robert McKinlay (Accrual: policy is Closed; periodicity is Closed; method is Purchase)
Item creator	James Boswell (1740-1795)
Owner	National Library of Scotland
Subject	James Boswell (1740-1795)
Is part of	National Library of Scotland collection (main)
OPAC	<a href="#">National Library of Scotland general collections catalogue</a>

This shows a simple web page display for the collection-level description for the Robert McKinlay Boswellian collection output in HTML format.

Listing 2 gives the HTML code for the table in this display.

## Listing 3

### Robert McKinlay Boswellian collection

#### MARC21 display format

```
=LDR 00000nac 22000007a 4500
=008 040413k99999999vp |||||d
=040 \\\$aStEdNL
=245 10\\$aRobert McKinlay Boswellian collection.
=300 \\\$a17 items.
=506 \\\$aDirect access is limited to specific groups.
=520 \\\$aA collection of 17 items, mainly by, or relating to, James Boswell (1740-1795),
which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay
of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at
Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a
scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light
of later popular Greek") he was also a member of Glasgow Bibliographical Society with a
particular interest in the lesser-known works of James Boswell. The collection includes a
volume of cuttings relating to McKinlay's bibliographical research and his correspondence
with noted Boswell scholars such as Frederick Pottle.
=555 8\\$aFinding aid: National Library of Scotland general collections
catalogue.$uhttp://www.nls.uk/catalogues/online/index.html
=594 \\\$bCollection-level record
=600 10\\$aBoswell, James,$d1740-1795.
=700 1\\$aBoswell, James,$d1740-1795.
=700 1\\$aMcKinlay, Robert,$ecollector.
```

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in MARC21 display format.

The following symbols are used for compatibility with the MarcEdit tool:

- “\” marks a blank tag indicator.
- “|” is a placeholder in the fixed-field tag 008.
- “\$” is a subfield indicator.

Listing 4 gives the MARC exchange record derived from this display format.

## Listing 4

### Robert McKinlay Boswellian collection

#### MARC21 exchange format

```
01321nac 22001577a
45000080041000000400011000412450043000523000014000955060049001095200754
00158555012500912594002801037600003201065700003201097700003401129-040414
k99999999vp |||||d- aStEdNL-10aRobert McKinlay Boswellian collection.- a17
items.- aDirect access is limited to specific groups.- aA collection of 17 items, mainly by,
or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934
from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a
minister in the Congregational Church at Pitsligo, then at Galston, and finally at
Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow
University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a
member of Glasgow Bibliographical Society with a particular interest in the lesser-known
works of James Boswell. The collection includes a volume of cuttings relating to
McKinlay's bibliographical research and his correspondence with noted Boswell scholars
such as Frederick Pottle.-8 aFinding aid: National Library of Scotland general collections
catalogue.uhttp://www.nls.uk/catalogues/online/index.html- bCollection-level record-10-
aBoswell, James,d1740-1795.-1 aBoswell, James,d1740-1795.-1 aMcKinlay, Robert,-
ecollector.-□
```

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in MARC21 exchange format using the MarcEdit tool.

The numbers following the leader field are tag values and offsets for the subfield content.

Listing 3 gives the MARC display format used to generate this exchange record.

## Screen 4

### Robert McKinlay Boswellian collection

#### National Library of Scotland catalogue MARC record

• full record    ● MARC record	
<i>Robert McKinlay Boswellian collection.</i>	
000	01289nac a22001697a 450
001	3557998
005	20040401081802.0
008	040315k99999999wp      d
040	__  a StEdNL
245	10  a Robert McKinlay Boswellian collection.
300	__  a 17 items.
520	__  a A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a member of Glasgow Bibliographical Society with a particular interest in the lesser-known works of James Boswell. The collection includes a volume of cuttings relating to McKinlay's bibliographical research and his correspondence with noted Boswell scholars such as Frederick Pottle.
555	8_  a Finding aid: National Library of Scotland catalogue.  u <a href="http://www.nls.uk/catalogues/online/index.html">http://www.nls.uk/catalogues/online/index.html</a>
594	__  b Collection-level record
600	10  a Boswell, James,  d 1740-1795.
700	1_  a Boswell, James,  d 1740-1795.
700	1_  a McKinlay, Robert,  e collector.

This is the MARC record display for the Robert McKinlay Boswellian collection in the test catalogue of the National Library of Scotland.

The record was output from SCONE in the MARC21 format specified by the National Library of Scotland. It was then reformatted to MARC exchange format using MarcEdit.

The exchange format record was sent to the NLS via email and loaded directly into the test catalogue. The display is standard for the catalogue, and has not been specifically adapted for collection-level records.

The blank leader date in the SCONE format has been replaced during loading into the catalogue.

Other differences between the SCONE format listed in Listing 3 and the NLS display format are due to variations in encoding syntax for blanks, placeholders, and subfield indicators, and are minor.

Screen 5 shows the same record as a full record display in the National Library of Scotland test catalogue.

## Screen 5

### Robert McKinlay Boswellian collection

#### National Library of Scotland catalogue full record

<input checked="" type="radio"/> full record	<input type="radio"/> MARC record
--	-----------------------------------

*Robert McKinlay Boswellian collection.*

**Database:** National Library of Scotland -- Main Catalogue

**Title:** [Robert McKinlay Boswellian collection.](#)

**Format:** Book

**Pagination:** 17 items.

**NLS note:** Collection-level record

**Summary:** A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek") he was also a member of Glasgow Bibliographical Society with a particular interest in the lesser-known works of James Boswell. The collection includes a volume of cuttings relating to McKinlay's bibliographical research and his correspondence with noted Boswell scholars such as Frederick Pottle.

**Finding aids:** Finding aid: National Library of Scotland catalogue.  
<http://www.nls.uk/catalogues/online/index.html>

**Subject:** [Boswell, James, 1740-1795.](#)

**Name added entry:** [Boswell, James, 1740-1795.](#)  
[McKinlay, Robert, collector.](#)

*No holdings available -- check at Circulation Desk.*

This is the full record display of the MARC21 record for the Robert McKinlay Boswellian collection in the test catalogue of the National Library of Scotland.

The record was output from SCONE in the MARC21 format specified by the National Library of Scotland. It was then reformatted to MARC exchange format using MarcEdit.

The exchange format record was sent to the NLS via email and loaded directly into the test catalogue. The display is standard for the catalogue, and has not been specifically adapted for collection-level records.

Screen 4 shows the same record as a MARC display in the National Library of Scotland test catalogue.

## Listing 5

### Robert McKinlay Boswellian collection

#### RSLP format

```
<?xml version="1.0"?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:dcmitype="http://purl.org/dc/dcmitype/"
  xmlns:vcard="http://www.w3.org/2001/vcard-rdf/3.0#"
  xmlns:cld="http://purl.org/rslp/terms#">
  <dcmitype:Collection rdf:about="http://scone.strath.ac.uk/coln/1349">
    <dc:title>
      Robert McKinlay Boswellian collection
    </dc:title>
    <dc:identifier>
      http://scone.strath.ac.uk/coln/1349
    </dc:identifier>
    <dc:description>
      A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which were
      purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of
      Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at Pitsligo,
      then at Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT
      Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular
      Greek") he was also a member of Glasgow Bibliographical Society with a particular interest
      in the lesser-known works of James Boswell. The collection includes a volume of cuttings
      relating to McKinlay's bibliographical research and his correspondence with noted Boswell
      scholars such as Frederick Pottle.
    </dc:description>
    <dc:subject>
      <cld:LCNAF>
        <rdf:value>
          Boswell, James, 1740-1795
        </rdf:value>
      </cld:LCNAF>
    </dc:subject>
    <dc:format>
      17 items
    </dc:format>
    <dc:type>
      Collection.Library
    </dc:type>
    <dcterms:isPartOf>
      National Library of Scotland collection (main)
    </dcterms:isPartOf>
    <cld:hasDescription>
      National Library of Scotland general collections catalogue
    </cld:hasDescription>
    <cld:accrualStatus>
      Accrual: policy is Closed; periodicity is Closed; method is Purchase
    </cld:accrualStatus>
  </dcmitype:Collection>
</rdf:RDF>
```

## Listing 5 (cont.)

### Robert McKinlay Boswellian collection

#### RSLP format

```
[...]
<cld:custodialHistory>
  Transferred from Rev Robert McKinlay to National Library of Scotland by sale in 1934.
</cld:custodialHistory>
<dc:creator rdf:resource=" http://scone.strath.ac.uk/agnt271" />
<dc:creator rdf:resource=" http://scone.strath.ac.uk/agnt1564" />
<cld:hasLocation rdf:resource="http://scone.strath.ac.uk/locn/1264" />
</dc:type:Collection>
<cld:Collector rdf:about=" http://scone.strath.ac.uk/agnt271">
  <vcard:FN>
    <cld:LCNAF>
      <rdf:value>
        McKinlay, Robert
      </rdf:value>
    </cld:LCNAF>
  </vcard:FN>
  <cld:agentHistory>
    Of Stonehouse, Lanarkshire. A minister in the Congregational Church at Pitsligo, then at
    Galston, and finally at Stonehouse from 1922-33; as well as being a scholar of NT Greek
    (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light of later popular Greek")
    he was also a member of Glasgow Bibliographical Society with a particular interest in the
    lesser-known works of James Boswell.
  </cld:agentHistory>
</cld:Collector>
<cld:Owner rdf:about=" http://scone.strath.ac.uk/agnt1564">
  <vcard:FN>
    <cld:LCNAF>
      <rdf:value>
        National Library of Scotland
      </rdf:value>
    </cld:LCNAF>
  </vcard:FN>
  <vcard:VOICE>
    + 44 131 226 4531
  </vcard:VOICE>
  <vcard:FAX>
    + 44 131 622 4803
  </vcard:FAX>
  <vcard:EMAIL>
    enquiries@nls.uk
  </vcard:EMAIL>
</cld:Owner>
[...]
```

## Listing 5 (cont.)

### Robert McKinlay Boswellian collection

#### RSLP format

```
[...]
<cld:Location rdf:about="http://scone.strath.ac.uk/locn/1264">
  <dc:title>
    National Library of Scotland
  </dc:title>
  <cld:address>
    George IV Bridge, Edinburgh, City of Edinburgh
  </cld:address>
  <cld:postcode>
    EH1 1EW
  </cld:postcode>
  <cld:country>
    Scotland
  </cld:country>
  <cld:accessConditions>
    Direct access is limited to specific groups.
  </cld:accessConditions>
  <cld:administrator rdf:resource=" http://scone.strath.ac.uk/agnt1564" />
  <cld:isLocationOf rdf:resource="http://scone.strath.ac.uk/coln/1349" />
</cld:Location>
<cld:Administrator rdf:about=" http://scone.strath.ac.uk/agnt1564">
  <vcard:FN>
    <cld:LCNAF>
      <rdf:value>
        National Library of Scotland
      </rdf:value>
    </cld:LCNAF>
  </vcard:FN>
  <vcard:VOICE>
    + 44 131 226 4531
  </vcard:VOICE>
  <vcard:FAX>
    + 44 131 622 4803
  </vcard:FAX>
  <vcard:EMAIL>
    enquiries@nls.uk
  </vcard:EMAIL>
</cld:Administrator>
</rdf:RDF>
```

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in RSLP RDF format.

The values of the `rdf:resource` and `rdf:about` qualifiers are unique identifiers based on entity keys from the database. The value of `dc:identifier` is based on the Collection table key.

## Listing 6

### Robert McKinlay Boswellian collection

#### IESR format

```
<?xml version="1.0"?>
<iesrDescription
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:dcmitype="http://purl.org/dc/dcmitype/"
  xmlns:vcard="http://www.w3.org/2001/vcard-rdf/3.0#"
  xmlns:cld="http://purl.org/rslp/terms#"
  xmlns:iesr="http://www.mimas.ac.uk/iesr/profile/#"
  xmlns="http://www.mimas.ac.uk/iesr/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.mimas.ac.uk/iesr/
http://www.mimas.ac.uk/iesr/profile/iesr.xsd">
  <dcmitype:Collection>
    <dc:identifier xsi:type="dcterms:URI">
      http://scone.strath.ac.uk/coln/1349
    </dc:identifier>
    <dc:title>
      Robert McKinlay Boswellian collection
    </dc:title>
    <dc:description xml:lang="en">
      A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which
      were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of
      Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at
      Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a
      scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light
      of later popular Greek") he was also a member of Glasgow Bibliographical Society with a
      particular interest in the lesser-known works of James Boswell. The collection includes a
      volume of cuttings relating to McKinlay's bibliographical research and his correspondence
      with noted Boswell scholars such as Frederick Pottle.
    </dc:description>
    <dc:type xsi:type="dcterms:DCMIType">Collection</dc:type>
    <dc:type xsi:type="rslpcd:CLDT">
      Collection.Library
    </dc:type>
    <iesr:hasService xsi:type="dcterms:URI">
      http://scone.strath.ac.uk/coln/26
    </iesr:hasService>
    <dc:subject xsi:type="dcterms:LCSH">
      Boswell, James, 1740-1795
    </dc:subject>
    <rslpcd:owner xsi:type="dcterms:URI">
      http://scone.strath.ac.uk/agn/1564
    </rslpcd:owner>
    <dcterms:isPartOf xsi:type="URI">
      http://scone.strath.ac.uk/coln/25
    </dcterms:isPartOf>
  </dcmitype:Collection>
</iesrDescription>
```

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in the JISC Information Environment Services Registry format.  
(cont.)

## **Listing 6 (cont.)**

### **Robert McKinlay Boswellian collection**

#### **IESR format**

The values of the URIs for association collections and agents are unique identifiers based on entity keys from the database. The value of dc:identifier is based on the Collection table key.

## Listing 7

### Robert McKinlay Boswellian collection

#### DC CD format

```

<?xml version="1.0"?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:dcmitype="http://purl.org/dc/dcmitype/"
  xmlns:vcard="http://www.w3.org/2001/vcard-rdf/3.0#"
  xmlns:cld="http://purl.org/rslp/terms#"
  <dcmitype:Collection rdf:about="http://scone.strath.ac.uk/coln/1349">
    <dc:identifier>
      http://scone.strath.ac.uk/coln/1349
    </dc:identifier>
    <dc:title>
      Robert McKinlay Boswellian collection
    </dc:title>
    <dcterms:abstract>
      A collection of 17 items, mainly by, or relating to, James Boswell (1740-1795), which
      were purchased by the Library in 1934 from the library of the Rev. Robert McKinlay of
      Stonehouse, Lanarkshire. McKinlay was a minister in the Congregational Church at
      Pitsligo, then at Galston, and finally at Stonehouse from 1922-33; as well as being a
      scholar of NT Greek (Ph.D. Glasgow University, 1927, "Semitisms in the N.T. in the light
      of later popular Greek") he was also a member of Glasgow Bibliographical Society with a
      particular interest in the lesser-known works of James Boswell. The collection includes a
      volume of cuttings relating to McKinlay's bibliographical research and his correspondence
      with noted Boswell scholars such as Frederick Pottle.
    </dcterms:abstract>
    <dcterms:extent>
      17 items
    </dcterms:extent>
    <dc:type>
      Collection.Library
    </dc:type>
    <cld:accrualStatus>
      Accrual: policy is Closed; periodicity is Closed; method is Purchase
    </cld:accrualStatus>
    <gen:provenance>
      Transferred from Rev Robert McKinlay to National Library of Scotland by sale in 1934.
    </gen:provenance>
    <dc:subject>
      <cld:LCNAF>
        <rdf:value>
          Boswell, James, 1740-1795
        </rdf:value>
      </cld:LCNAF>
    </dc:subject>
    <dc:creator>
      <rdf:Description rdf:about="http://scone.strath.ac.uk/agnt/271">
        <rdfs:label>
          Robert McKinlay
        </rdfs:label>
      </rdf:Description>
    </dc:creator>
  </dcmitype:Collection>
</rdf:RDF>
[...]
```

## Listing 7 (cont.)

### Robert McKinlay Boswellian collection

#### DC CD format

```
[...]
<marcrel:own>
  <rdf:Description rdf:about="http://scone.strath.ac.uk/agent/1564">
    <rdfs:label>
      National Library of Scotland
    </rdfs:label>
  </rdf:Description>
</marcrel:own>
<gen:isAvailableAt>
  <rdf:Description rdf:about="http://scone.strath.ac.uk/locn/1264">
    <dc:title>
      National Library of Scotland
    </dc:title>
  </rdf:Description>
</gen:isAvailableAt>
<dcterms:isPartOf>
  <rdf:Description rdf:about="http://scone.strath.ac.uk/coln/25">
    <dc:title>
      National Library of Scotland collection (main)
    </dc:title>
  </rdf:Description>
</dcterms:isPartOf>
<dc:description>
  <rdf:Description rdf:about="http://scone.strath.ac.uk/coln/26">
    <dc:title>
      National Library of Scotland general collections catalogue
    </dc:title>
  </rdf:Description>
</dc:description>
</dc:type:Collection>
</rdf:RDF>
```

This is the listing for the collection-level description for the Robert McKinlay Boswellian collection output in Dublin Core Collection Description RDF format.

The values of the `rdf:about` qualifier and `dc:identifier` are unique identifiers based on entity keys from the database.

## Listing 8

### Edinburgh University Library collection

#### Text format

(c) SLIC/CDLR and contributing organizations  
Not to be reproduced without permission  
Title: [Edinburgh University Library collection].  
Description: The collection supports the learning, teaching and research interests of Edinburgh University.  
Type: Collection.Library.Text.Distributed  
Education levels: Undergraduate; Postgraduate.  
Collector: Edinburgh University Library (Accrual: policy is Active; periodicity is Continuous; method is Deposit and purchase).  
Owner: Edinburgh University.  
Is part of: CAIRNS collection; COPAC collection.  
Contains: Edinburgh University Artificial Intelligence Library collection; Edinburgh University Chemistry Library collection; Edinburgh University CTVM (Centre for Tropical Veterinary Medicine) Library collection; Edinburgh University Darwin Library collection; Edinburgh University Easter Bush Veterinary Centre Library collection; Edinburgh University Erskine Medical Library collection; Edinburgh University James Clerk Maxwell Library collection; Edinburgh University Law and Europa Library collection; Edinburgh University Main Library collection; Edinburgh University Moray House Library (Education) collection; Edinburgh University New College Library (Divinity) collection; Edinburgh University Psychiatry Library collection; Edinburgh University Reid Music Library collection; Edinburgh University Robertson Engineering Library collection; Edinburgh University Scottish Studies Library collection; Edinburgh University Veterinary Library collection; Moray House Library (Faculty of Education) collection; Royal Hospital for Sick Children Library collection; Royal Infirmary of Edinburgh Postgraduate Library collection; W.H. Playfair drawings.  
Catalogue: Edinburgh University Library catalogue (<http://catalogue.lib.ed.ac.uk/>).

This is the listing for the collection-level description for the Edinburgh University Library collection output in text format.

The collection granularity is monolithic, aggregating all resources held by Edinburgh University Library. This mirrors the granularity of its catalogue which aggregates metadata for all resources.

This collection is distributed; that is, it is composed of sub-collections which have different physical locations. Distributed collections themselves do not have a location.

The sub-collections are listed on a single line.

This collection also has two super-collections because its catalogue is part of the CAIRNS distributed union catalogue and the COPAC physical union catalogue. These union catalogues describe the aggregated collection of resources of all member libraries.

## Listing 9

### Edinburgh University Library collection

#### HTML format

```

<!-- (c) SLIC/CDLR and contributing organizations -->
<!-- Not to be reproduced without permission -->
<table>
<tr>
<td valign="top">
Title
</td>
<td valign="top">
[Edinburgh University Library collection]
</td>
</tr>
<tr>
<td valign="top">
Description
</td>
<td valign="top">
The collection supports the learning, teaching and research interests of Edinburgh
University.
</td>
</tr>
<tr>
<td valign="top">
Type
</td>
<td valign="top">
Collection.Library.Text.Distributed
</td>
</tr>
<tr>
<td valign="top">
Education level
</td>
<td valign="top">
Undergraduate
</td>
</tr>
<tr>
<td valign="top">
Education level
</td>
<td valign="top">
Postgraduate
</td>
</tr>
[...]
```

## Listing 9 (cont.)

### Edinburgh University Library collection

#### HTML format

```
[...]
<tr>
<td valign="top">
Collector
</td>
<td valign="top">
Edinburgh University Library (Accrual: policy is Active; periodicity is Continuous; method
is Deposit and purchase)
</td>
</tr>
<tr>
<td valign="top">
Owner
</td>
<td valign="top">
Edinburgh University
</td>
</tr>
<tr>
<td valign="top">
Is part of
</td>
<td valign="top">
CAIRNS collection
</td>
</tr>
<tr>
<td valign="top">
Is part of
</td>
<td valign="top">
COPAC collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Artificial Intelligence Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Chemistry Library collection
</td>
</tr>
[...]
```

## Listing 9 (cont.)

### Edinburgh University Library collection

#### HTML format

```
[...]
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University CTVM (Centre for Tropical Veterinary Medicine) Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Darwin Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Easter Bush Veterinary Centre Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Erskine Medical Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University James Clerk Maxwell Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Law and Europa Library collection
</td>
</tr>
[...]
```

## Listing 9 (cont.)

### Edinburgh University Library collection

#### HTML format

```
[...]
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Main Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Moray House Library (Education) collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University New College Library (Divinity) collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Psychiatry Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Reid Music Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Robertson Engineering Library collection
</td>
</tr>
[...]
```

## Listing 9 (cont.)

### Edinburgh University Library collection

#### HTML format

```
[...]
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Scottish Studies Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Edinburgh University Veterinary Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Moray House Library (Faculty of Education) collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Royal Hospital for Sick Children Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
Royal Infirmary of Edinburgh Postgraduate Library collection
</td>
</tr>
<tr>
<td valign="top">
Contains
</td>
<td valign="top">
W.H. Playfair drawings
</td>
</tr>
[...]
```

## Listing 9 (cont.)

### Edinburgh University Library collection

#### HTML format

```
[...]
<tr>
<td valign="top">
OPAC
</td>
<td valign="top">
<a href='http://catalogue.lib.ed.ac.uk/'>Edinburgh University Library catalogue</a>
</td>
</tr>
</table>
```

This is the listing for the collection-level description for the Edinburgh University Library collection output in HTML format as a table.

Screen 6 shows a simple web page display using this listing.

## Screen 6

### Edinburgh University Library collection

#### HTML display

Title	[Edinburgh University Library collection]
Description	The collection supports the learning, teaching and research interests of Edinburgh University.
Type	Collection Library Text Distributed
Education level	Undergraduate
Education level	Postgraduate
Collector	Edinburgh University Library (Accrual: policy is Active; periodicity is Continuous; method is Deposit and purchase)
Owner	Edinburgh University
Is part of	CAIRNS collection
Is part of	COPAC collection
Contains	Edinburgh University Artificial Intelligence Library collection
Contains	Edinburgh University Chemistry Library collection
Contains	Edinburgh University CTVM (Centre for Tropical Veterinary Medicine) Library collection
Contains	Edinburgh University Darwin Library collection
Contains	Edinburgh University Easter Bush Veterinary Centre Library collection
Contains	Edinburgh University Erskine Medical Library collection
Contains	Edinburgh University James Clerk Maxwell Library collection
Contains	Edinburgh University Law and Europa Library collection
Contains	Edinburgh University Main Library collection
Contains	Edinburgh University Moray House Library (Education) collection
Contains	Edinburgh University New College Library (Divinity) collection
Contains	Edinburgh University Psychiatry Library collection
Contains	Edinburgh University Reid Music Library collection
Contains	Edinburgh University Robertson Engineering Library collection
Contains	Edinburgh University Scottish Studies Library collection
Contains	Edinburgh University Veterinary Library collection
Contains	Moray House Library (Faculty of Education) collection
Contains	Royal Hospital for Sick Children Library collection
Contains	Royal Infirmary of Edinburgh Postgraduate Library collection
Contains	W.H. Playfair drawings
OPAC	<a href="#">Edinburgh University Library catalogue</a>

This shows a simple web page display for the collection-level description for the Edinburgh University Library collection output in HTML format.

Each sub- and super-collection is listed in a separate row of the table.

Listing 9 gives the HTML code for the table in this display.

## Listing 10

### Edinburgh University Library catalogue

#### Text format

(c) SLIC/CDLR and contributing organizations  
Not to be reproduced without permission  
Title: [Edinburgh University Library catalogue].  
Type: Catalogue.Library.Text.Virtual  
Electronic location: Edinburgh University Library online catalogue  
(<http://catalogue.lib.ed.ac.uk/>).  
Item creator: Edinburgh University Library.  
Owner: Edinburgh University.  
Catalogue of: Edinburgh University Library collection.

This is the listing for the collection-level description for the Edinburgh University Library catalogue output in text format.

The label “Item creator” refers to the Agent who creates the catalogue records or metadata.

## Listing 11

### Edinburgh University Library catalogue

#### HTML format

```
<!-- (c) SLIC/CDLR and contributing organizations -->
<!-- Not to be reproduced without permission -->
<table>
<tr>
<td valign="top">
Title
</td>
<td valign="top">
[Edinburgh University Library catalogue]
</td>
</tr>
<tr>
<td valign="top">
Type
</td>
<td valign="top">
Catalogue.Library.Text.Virtual
</td>
</tr>
<tr>
<td valign="top">
Electronic location
</td>
<td valign="top">
<a href="http://catalogue.lib.ed.ac.uk/">Edinburgh University Library online catalogue</a>
</td>
</tr>
<tr>
<td valign="top">
Item creator
</td>
<td valign="top">
Edinburgh University Library
</td>
</tr>
<tr>
<td valign="top">
Owner
</td>
<td valign="top">
Edinburgh University
</td>
</tr>
<tr>
<td valign="top">
Catalogue of
</td>
<td valign="top">
Edinburgh University Library collection
</td>
</tr>
</table>
```

(cont.)

## **Listing 11 (cont.)**

### **Edinburgh University Library catalogue**

#### **HTML format**

This is the listing for the collection-level description for the Edinburgh University Library catalogue output in HTML format as a table.

Screen 7 shows a simple web page display using this listing.

## Screen 7

### Edinburgh University Library catalogue

#### HTML display

Title	[Edinburgh University Library catalogue]
Type	Catalogue.Library.Text.Virtual
Electronic location	<a href="#">Edinburgh University Library online catalogue</a>
Item creator	Edinburgh University Library
Owner	Edinburgh University
Catalogue of	Edinburgh University Library collection

This shows a simple web page display for the collection-level description for the Edinburgh University Library catalogue output in HTML format.

Listing 11 gives the HTML code for the table in this display.

## Listing 12

### Edinburgh University Library catalogue

#### IESR format

```
<?xml version="1.0"?>
<iesrDescription
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:dcmitype="http://purl.org/dc/dcmitype/"
  xmlns:vcards="http://www.w3.org/2001/vcard-rdf/3.0#"
  xmlns:cld="http://purl.org/rslp/terms#"
  xmlns:iesr="http://www.mimas.ac.uk/iesr/profile/#"
  xmlns="http://www.mimas.ac.uk/iesr/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.mimas.ac.uk/iesr/
http://www.mimas.ac.uk/iesr/profile/iesr.xsd">
  <dcmitype:Collection>
    <dc:identifier xsi:type="dcterms:URI">
      http://scone.strath.ac.uk/coln/20
    </dc:identifier>
    <dc:title>
      [Edinburgh University Library catalogue]
    </dc:title>
    <dc:type xsi:type="dcterms:DCMIType">Collection</dc:type>
    <dc:type xsi:type="rslpcd:CLDT">
      Catalogue.Library.Text.Virtual
    </dc:type>
    <iesr:hasService xsi:type="dcterms:URI">
      http://catalogue.lib.ed.ac.uk/
    </iesr:hasService>
    <iesr:usesControlledList xsi:type="iesr:CtrlVocabList">
      LCSH
    </iesr:usesControlledList>
    <iesr:usesControlledList xsi:type="iesr:CtrlVocabList">
      DDC21
    </iesr:usesControlledList>
    <rslpcd:owner xsi:type="dcterms:URI">
      http://scone.strath.ac.uk/agn/4549
    </rslpcd:owner>
  </dcmitype:Collection>
</iesrDescription>
```

This is the listing for the collection-level description for the Edinburgh University Library catalogue output in the JISC Information Environment Services Registry format.

This illustrates output of the schemes used to retrieve metadata by subject.

## Listing 13

### Edinburgh University Library catalogue

#### DC CD format

```
<?xml version="1.0"?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:dcmitype="http://purl.org/dc/dcmitype/"
  xmlns:vcard="http://www.w3.org/2001/vcard-rdf/3.0#"
  xmlns:cld="http://purl.org/rslp/terms#"
  <dcmitype:Collection rdf:about="http://scone.strath.ac.uk/coln/20">
    <dc:identifier>
      http://scone.strath.ac.uk/coln/20
    </dc:identifier>
    <dc:title>
      [Edinburgh University Library catalogue]
    </dc:title>
    <dc:type>
      Catalogue.Library.Text.Virtual
    </dc:type>
    <marcrel:own>
      <rdf:Description rdf:about="http://scone.strath.ac.uk/agnt/4549">
        <rdfs:label>
          Edinburgh University
        </rdfs:label>
      </rdf:Description>
    </marcrel:own>
    <gen:isAvailableAt>
      <rdf:Description rdf:about="http://scone.strath.ac.uk/locn/2030">
        <dc:title>
          Edinburgh University Library online catalogue
        </dc:title>
      </rdf:Description>
    </gen:isAvailableAt>
  </dcmitype:Collection>
</rdf:RDF>
```

This is the listing for the collection-level description for the Edinburgh University Library catalogue output in the Dublin Core Collection Description format expressed in RDF syntax.

The value of **gen:isAvailableAt** is the name of the electronic location of the catalogue.

## Screen 8

### MacColl and Seeger collection

#### SCONE service website

 Home

MacColl and Seeger collection

 Help

 Online Catalogues

 Super Collections

<b>Description</b>	The library of the folk-singers Ewan MacColl and Peggy Seeger, two key members of the Folk Music revival, which began in the 1950s. The collection covers British and Irish folk-song and ballads, but is particularly strong on Scotland.
<b>Type</b>	Collection.Library.Text.Special
<b>Location</b>	Goldsmiths College Library New Cross <a href="#">London</a> (City of London, England) SE14 6NW
<b>Collectors</b>	<a href="#">Ewan MacColl</a> [Accrual: policy is Closed; periodicity is Closed; method is Purchase] <a href="#">Peggy Seeger (1935-)</a> [Accrual: policy is Closed; periodicity is Closed; method is Purchase]
<b>Subjects</b>	<a href="#">Folk songs, English</a> <a href="#">Folk songs, Irish</a> <a href="#">Folk songs, Scots</a> <a href="#">Folk songs, Scottish Gaelic</a>
<b>Part of</b>	<a href="#">Goldsmiths College Library collection</a>
<b>Catalogues</b>	<a href="#">Goldsmiths College Library catalogue</a>

This shows the web page for the collection-level description for the MacColl and Seeger collection in the SCONE service.

This collection is an example of one held in another UK clump, InforM25.

## Listing 14

### MacColl and Seeger collection

#### Text format

(c) SLIC/CDLR and contributing organizations  
Not to be reproduced without permission  
Title: MacColl and Seeger collection.  
Description: The library of the folk-singers Ewan MacColl and Peggy Seeger, two key members of the Folk Music revival, which began in the 1950s. The collection covers British and Irish folk-song and ballads, but is particularly strong on Scotland.  
Type: Collection.Library.Text.Special  
Location address: Goldsmiths College Library, New Cross, London, SE14 6NW, City of London, England.  
Collectors: Ewan MacColl (Accrual: policy is Closed; periodicity is Closed; method is Purchase); Peggy Seeger (1935-) (Accrual: policy is Closed).  
Subject: Folk songs, English; Folk songs, Irish; Folk songs, Scots; Folk songs, Scottish Gaelic.  
Dewey: 782.421622  
Is part of: Goldsmiths College Library collection.  
Catalogue: Goldsmiths College Library catalogue (<http://library.gold.ac.uk/>).

This is the listing for the collection-level description for the MacColl and Seeger collection output in text format.

This collection is an example of one held in another UK clump, InforM25.

## **Conclusion**

The SCONE database can output collection-level descriptions in a variety of formats for a variety of purposes.

No serious issues for the database have been identified.

Some amendments to the SCONE database schema are required to create output that fully conforms with formats and schemas developed with the assistance of JISC elsewhere. These amendments will be carried out by the Centre for Digital Library Research before the end of 2004, as part of its general maintenance and development of SCONE and associated services.

The development of output routines has revealed a number of ambiguities and anomalies in external schema. Resolution of many of these issues can be achieved quickly, at little cost, by amending schema descriptions and data entry guidelines.

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