The Cataloguing and Classification Team at Edinburgh University Library was formed in 2004 by merging two teams that handled bibliographic cataloguing and more complex subject cataloguing and classification respectively. One objective of the new team was to provide a streamlined, centralised service for all the University’s libraries with less acquisitions and cataloguing work carried out by the Site Libraries. The University merged with Moray House Institute of Education in 1998 and Edinburgh College of Art (ECA) in 2011, bringing with them new collections; and since the 1990s, the Libraries have undergone a process of rationalization with smaller departmental libraries merging, collections transferring to the Main Library and the establishment of an Annexe facility for low use material. Library of Congress Classification (LCC) and MARC21 were adopted in 2000, as was the Voyager system in a joint venture with the National Library of Scotland.

2014 saw the creation of the new post of Metadata Co-ordinator with overall responsibility for managing the team and the adoption of Resource Description and Access (RDA) as the cataloguing standard for modern collections. The implementation of Ex Libris’ Alma and Primo software followed in 2015.

The team was renamed Metadata Services in 2014 and currently comprises 5 senior staff (3.5 FTE) and 13 team members (11.5 FTE). Staff activities include managing new acquisitions on a rota basis; cataloguing projects including Rare Books work; and providing support to the 8 Site Libraries and Annexe. Current service targets are to catalogue and classify 90% of purchased monographs within 20 working days, and all urgent items within 5 working days.

**Shelf-ready workflows 2013-2016**

A review of acquisitions and cataloguing procedures in 2011 looked at streamlining workflows for core activities, with the aims of reducing by 50% the time between recommendation and the resource becoming available and freeing up cataloguer resources to tackle an estimated 350,000 items in need of cataloguing.

This exercise was the catalyst for the introduction of shelf-ready workflows for print acquisitions in late 2013. The decision was made to trial with one supplier, with books arriving catalogued, barcoded and classified from January 2014. 81 initial records were then assessed for quality and appropriateness of the LCC number.

Bibliographic records were assessed against a matrix that recorded the number of errors and their severity, graded as minor, moderate or severe. Severe errors included incorrect 1xx Main Entries and errors in the 245 $a or $b; moderate included the omission of contributors in 7xx fields; and minor included errors in recording pagination or missing Relationship Designators in RDA records. Following the initial assessment, feedback was sent to the supplier, including a summary of each record supplied and detailed feedback on a handful or records deemed unacceptable.

The feedback process was felt to be beneficial to both parties, with a marked improvement in the quality of subsequent records.
Workflows were established to manage the quality control of supplied metadata using reports targeting areas identified as problematic by the initial checks and during the transition to RDA.

Each week, a report of updated records containing the vendor specific 035 marker is created and the records exported as a MARC file. Along with order records overlaid at receipt, the report contains any record with the 035 marker updated during the previous week, including corrections resulting from the previous week’s report. These records are identified by comparing the 001 fields from the current and previous report in Excel and removed from the file using MARCEdit.

MARCEdit is then used to generate reports by checking for the presence of specific MARC fields, which are then merged into three reports covering editions, series and translations.

<table>
<thead>
<tr>
<th>MARC fields</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>250, 775</td>
<td>Editions</td>
</tr>
<tr>
<td>490 –1st indicator “0”, 440</td>
<td>Series</td>
</tr>
<tr>
<td>041, 240, 546</td>
<td>Translations</td>
</tr>
</tbody>
</table>

Fig. 2: Summary of MARC field reports and merged reports in shelf-ready checking workflows
The Editions Report enables checking for cases where authorship may have changed between editions; the Series Report allows checking for LC authority records and entering correct 490/830 fields; and the Translations Report enables checks for correct 100, 240 and 700 fields and appropriate RDA Relationship Designators.

The LCC Cutter report (050 fields containing a full stop and associated 245) enables cataloguers to check whether subject headings are appropriate and make further checks against ClassWeb and our own catalogue.

From January 2014 to June 2015, shelf-ready acquisitions rose to around 100 new titles per week, representing a week’s throughput for 1 FTE cataloguer. The estimated time for report generation and checking was ½ day FTE each week, giving a saving of 0.9 FTE cataloguer time, although the workflow is more time consuming for Acquisitions staff.

Following Alma go-live in June 2015, new acquisitions were received shelf-ready within a short period, but report generation would not return until January 2016 due to the operational priorities of the Systems Team. Since January 2014, only Veterinary Medicine had been added to the scope of shelf-ready acquisitions, so the return of the reports provided the opportunity to expand the programme.

ECA was chosen as the next site, using a new workflow to procure a bibliographic record combined with a specialist cataloguer assigning LCC numbers in line with ECA practice. This would add a further 30-40 records per week. Artists’ books, regarded as a special collection, would not be acquired shelf-ready.

A new checking matrix focussed on the RDA requirements for art and design materials, including checking for appropriate Relationship Designators for Creators and the recording of visual content. The first books arrived in March 2016. Once workflows for ECA are fully in place, the shelf-ready programme will be rolled out across all suitable subject areas before trials with other suppliers later in 2016.

**E-book bulk loading for collections**

Loading batches of new bibliographic records or overlaying records sent for external processing was handled by the Systems Team until autumn 2014 when Metadata Services took over the batch loading of new bibliographic records for e-book collections and evidence-based selection programmes.

MARCEdit was used to perform standard edits, add the institutional EZproxy marker and remove unwanted MARC fields from record files, which were then loaded using the Voyager Web-Admin client. Reports of records loaded were generated using Access and Excel before checks on the Voyager Cataloguing Client and online catalogue. Activities such as de-duplication and record deletion were managed by the Systems Team using the Voyager SysAdmin client. Overall, managing batches of records required 6 different applications or clients and the co-operation of two teams; and managing individual collections or deleting files was difficult and time consuming. Also, access to e-books collections was dependent on bibliographic records appearing in the online catalogue.

E-book collections were identified using holdings records containing a collection specific marker, which was repeated in an 852 field in the bibliographic record. Migration to Alma requires that all e-resource records are identified in advance and Alma does not support the use of physical inventory for electronic formats, so the 852 contents were copied to the 952 field, which was then defined as Local Electronic Resources and configured in Alma’s search indexes. The 952 field was then used to identify e-resource records during , and holdings records were deleted. The 952 fields were retained, and using a locally configured tag system has proved useful for managing e-book collections, with identification of bibliographic records at the collection level possible using Alma’s Advanced Search functionality.
Alma offered a number of advantages for the management of e-books and their associated bibliographic records. The Central Knowledge Base (CKB) allows for easy management of access at a collection level and the system has a custom inventory format for e-resources called the Portfolio, which can link bibliographic records to active collections in the CKB and also to the appropriate licence. Bibliographic records are available through Alma’s Community Zone (CZ), a centrally hosted database of bibliographic and authority metadata. Although brief in nature, these records mean that e-book collections can be made available for discovery once access is configured and can also serve as a stop gap until full level records can be sourced, assessed and loaded.

Alma allows for the creation of multiple profiles to manage bibliographic record import, which can be configured for individual collections and re-edited as required. De-duplication can be handled at import using as set of matches based around identifiers in MARC fields 001, 020, 022 and 035, with options to load or reject matched records. This is tied into a granular reporting tool, which allow for the creation of retrievable sets of loaded, matched and rejected records. Alma’s Normalization Rules, a powerful, script based global editing tool, can be linked to the Import Profiles to edit incoming records to local standards, or set up as a process to be run once loading is complete. Although MARCEdit is still used for initial file assessment, all subsequent steps can be managed by a single operative with the appropriate level of permissions using a single client.

The setting up of Import Profiles for individual collections required considerable input of senior staff time in the weeks following Alma go-live, but the benefits are that bulk loads can managed by an individual and a reduction in the time for all stages of the process from 2-3 hours to around 30 minutes. In addition, the deletion of unwanted records can be managed using set creation and automated process tools. The combination of these highly configurable tools and the 952 marker have proved extremely useful in managing situations such as changes to the content of a collection or the supply of a set of updated records, with a workflow developed to remove all existing records for a given collection and re-load a full, accurate set of new records, all under collection level control in the CKB.
E-book single purchase workflows 2015-2016

One-off e-book purchases were previously catalogued individually and managed using an Excel document with separate tabs for each vendor. Most vendors supplied MARC records, which meant that access was normally available at the point of purchase; but the quality of records varied considerably from vendor to vendor and one supplier, from which one in three titles were ordered, only provided records several days after the purchase. With 3375 individual purchases for the period Jan 2014 to May 2015, this represented 198 titles per month requiring full cataloguer attention, equivalent to around 0.5 FTE cataloguer time.

Alma offered the potential to improve access time for purchases with a lag time in record supply, with Acquisitions staff sourcing and importing a minimal record from the CZ to the institutional catalogue and creating an active Portfolio that would then be published to Primo. The CZ records normally contain little more than a title and multiple ISBNs, so an intervention step was required to ensure that only the ISBN consistent with the supplier (normally the ‘vendor neutral’ ISBN) was retained. Records supplied subsequently as small batches could then be loaded using an Import Profile configured to match on ISBN and format, overlaying the minimal level records with full ones.

In March 2016, it was observed that the overall quality of e-book records had improved. A sample of recent records from all major suppliers were checked for accuracy, authority control and the presence of subject headings, with the result that records from suppliers totalling over 50% of individual purchases could be passed without detailed checking. The idea of targeted reports for quality control checks, similar to those used for shelf-ready print acquisitions, was proposed as the next step.

Conclusion

New workflows have seen considerable streamlining of the management of new print and e-resources, which has allowed Metadata staff to be re-deployed to Rare Books work and supporting the increasing Acquisitions load. A new initiative to increase the provision of core teaching resources in 2015 saw up to 4 FTE cataloguer resources re-deployed on reviewing course reading lists and assisting Acquisitions. This had benefits for both Acquisitions and Metadata, with several cataloguers now fully competent in end to end acquisitions and cataloguing workflows. It is hoped, however, that further efficiencies will lead to more resources being focussed on Rare Books and other retro-cataloguing projects in 2016 and beyond.