I work in the Metadata Services team at LSE which is part of the Collection Services group. The Group as a whole has a remit to acquire, catalogue and make available resources to support the teaching and research activities of the Library’s user community, and to ensure preservation of print and electronic collections. The Metadata Services team produces and manages metadata for Alma, our LMS and also creates and manages metadata for our institutional repositories and digital library. My responsibility is to oversee the creation and management of metadata in Alma. We migrated from Voyager to Alma in July 2014 and the planning process brought several changes to our team structures in addition to the new LMS. This article will look at how our print monograph cataloguing workflows were affected by these changes.

The beginning of the process for the LMS migration was to review our current workflows using LEAN methodology. Key staff involved in a variety of processes attended workshops and developed process maps for existing workflows and for potential new simplified workflows. Though the potential workflows were idealised and were drawn up before seeing the capabilities of Alma the process was useful in highlighting problems with the current workflows and opening up discussion so that when workflows were developed with Alma in mind it was easier to think outside our current processes. This exercise also encouraged us to think about our workflows from end to end rather than just viewing those parts that affected our team.

At the same time staff changes and preparation for future workflows and the new LMS meant that the teams in Collection Services were restructured. The Bibliographic Services team that had responsibility for metadata creation and book acquisitions was split into separate Discovery and Metadata and Procurement and Access teams. Subsequent changes have changed the structure and team names further but this initial change was the one that was most significant for cataloguing workflows.

The main change for cataloguing workflows was the redistribution of the library assistants from the former Bibliographic Services team into separate acquisitions and metadata teams (Figure 1). This split 5.2 FTE library assistants into 2.4 FTE for the Procurement and Access team and 2.8 FTE for the Discovery and Metadata team. The decision on which library assistants would be in each team was made on the basis of existing strengths in each area of work and followed weighting that had been given to job descriptions prior to the division of the team. These library assistants had previously divided the work of ordering, receiving, invoicing and cataloguing print monographs, as well as metadata creation for the institutional repositories, between them. Serials cataloguing, eresource cataloguing and materials in other formats were dealt with by the senior library assistant and assistant librarian. This article will look at the changes to print monograph cataloguing workflows that the changes to team structure and LMS brought.
Figure 1 Top - structure of Bibliographic Services and Serials teams in December 2013. Bottom - revised structure of Procurement and Access and Discovery and Metadata teams from January 2014.
Prior to the changes to LMS and team structure the print monograph workflow was as follows:

- Library assistants did all the work on a batch of books from opening the box, creating orders if necessary, receiving, and invoicing to cataloguing items.
- Labelling and shelving were the only parts of the receipt to shelf process done outside Bibliographic Services.
- Most items were initially entered onto the LMS at the point of ordering which happened in several ways. A record was provided by the vendor with EOD information and was loaded to create the order. Where the order was created manually a record was usually downloaded or if no record was available a brief record was created in order to attach the order.
- For all print monographs the record was reviewed when the item arrived. The majority of the material we receive is catalogued and classified by the vendor (57%) which meant that minimal work was needed on these records. However in Voyager and initially in Alma classmarks and barcodes were not imported even where provided by the vendor so these details had to be added to records manually.

The change in team structure and the change in LMS meant that it was necessary to review the way work would be divided among the team. The pressures of training staff on new LMS procedures in a short period of time and the need to begin processing material quickly once migration was complete meant that temporary workflows were used for the first few months using Alma.

Initially the Procurement and Access team dealt with all ordering, receiving and invoicing work and the Discovery and Metadata team dealt with all cataloguing work. This meant that the Procurement and Access team were able to focus on learning to use acquisitions areas of Alma and the Discovery and Metadata team could focus on learning the cataloguing functions of the system. There was little overlap in the initial training between the two teams. The Procurement and Access team were given brief training on downloading bibliographic records for ordering purposes but not on any editing functions. The Discovery and Metadata team were given no training on receiving or invoicing functions. The receiving and traditional cataloguing work had to be balanced alongside the other work the teams did. The Discovery and Metadata team now dealt with all metadata creation for the institutional repository which was an increasing workload competing for traditional cataloguing time. The Procurement and Access team was taking on increased responsibility for ordering material so they too had less time for cataloguing.

The temporary workflow was a good initial solution to the problem of training staff quickly. However it was not a sustainable long-term workflow for the following reasons:

- Every item was handled at least twice with the Procurement and Access team processing the invoice and then passing the items to the Discovery and Metadata team for cataloguing.
- Figure 2 shows the increasing backlog of items awaiting cataloguing between August and November 2014.
- The members of the Procurement and Access team who had previously done considerable cataloguing work were no longer using those skills and were in danger of losing them.
- The Discovery and Metadata team had little knowledge of acquisitions procedures in the new system and so were unable to resolve problems themselves.
- Much of the cataloguing work was checking good quality records provided by vendors which did not use the Discovery and Metadata team library assistants’ more advanced cataloguing skills to their best advantage. The large volume of material that was being catalogued by the Discovery and Metadata team meant that there was little time to allow the team to develop and use more advanced cataloguing skills.
After discussion between the Procurement and Access and Discovery and Metadata teams we began trialling an initial division of work that played to the strengths of the two teams but continued to spread work between the teams. Both teams would do some receiving and invoicing work and some cataloguing work. The Procurement and Access team would deal with all order creation so any items arriving without orders would be processed first by the Procurement and Access team. A small proportion of ordered items arrive without any information on Alma. In these cases the Procurement and Access team would create or download a brief catalogue record and order and receive and invoice the item. It would then be passed to the Discovery and Metadata team for full cataloguing and classification. For items arriving with orders already on Alma receiving, invoicing and cataloguing work would be split between the two teams according to the complexity of the cataloguing required. Items received from vendors with full catalogue records would be received, invoiced and the cataloguing checked by the Procurement and Access team. Items received with only records created at the point of order would be received, invoiced, catalogued and classified by the Discovery and Metadata team. As would gift items which do not have order information recorded on the LMS.

The different types of material described above reflected material received from different vendors. This meant that dividing material between the two teams as it arrived was a relatively simple division to implement. Further training was delivered to the two teams to enable them to carry out these functions in Alma. The training began in November 2014 and the new division of work quickly made an impact on the cataloguing backlog. Figure 2 demonstrates the significant reduction in the metadata team backlog after the policy was implemented. Some of the training was delivered as peer to peer training which gave library assistants experience of delivering training and demonstrated to them how much knowledge they had gained in the relatively short time we had been using Alma.

The migration to Alma has meant that control for imports has shifted from the LMS systems teams to acquisitions and cataloguing staff. This has made it much easier to tweak and refine the processes we use. As we have developed our use of Alma we have been able to increase the automation applied to imports for vendor supplied records. This means that where items arrive fully processed with barcodes and classmark labels these details are now imported into Alma. We are now planning to review the policy of examining
vendor supplied records individually and it is hoped that we will be able to move to a fully shelf-ready process for the material that arrives fully catalogued, classified and labelled. While our workflows have been evolving and changes have been made to our automated imports for vendor supplied records it has been valuable to view the records and check for errors in the process. The work done on these records aside from that is largely authority control so we will need to assess our authority control procedures to ensure that any errors that would have been corrected manually are picked up by other processes.

The migration to a new LMS and the related team restructuring brought extensive changes to our workflows. However the chance to review our workflows and in particular to look at them from end to end was valuable in developing new workflows which were as efficient as possible. The very close relationship between acquisitions and cataloguing processes meant that workflows had to be developed by discussion between the two teams rather than in isolation. Working so closely with the Procurement and Access team has meant that we have a good basic understanding of our respective workflows which makes problem solving easier. The increased control over the technical aspects of the acquisitions and cataloguing processes that the switch to Alma brought has made refining and developing workflows easier. This has also allowed staff to develop new technical skills and streamlining workflows means that material gets to the shelves more quickly.