Metadata & Discovery Group

Unchartered cells

Cataloguing with Excel in Covid and beyond

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ABSTRACT

Cataloguer training takes time, patience and a lot of learning – from different standards and procedures depending on the material to grappling with different Library Management Systems and all the jargon associated.

When Covid hit, the recently digitised collection of HMSO catalogues became an ideal working from home project. Each listing had adequate information to make a catalogue record to allow these partially hidden items to be discoverable. The problem was that cataloguers at the National Library of Scotland only had their personal devices to begin with and no access to our usual software. Plus, work was also required for Library staff who were not trained cataloguers.

The solution – Excel spreadsheets. A friendly and familiar format where data entered in an organised fashion could then be imported into Alma (our Library Management System) to make items available. Users would be able to create Metadata quickly with minimal training and no knowledge required about MARC or RDA standards.

What started as a Covid solution has now become common place for specific routine metadata projects for staff without in-depth cataloguing training.

KEYWORDS data entry; spreadsheets; delimited data to MARC; Alma; normalisation rules

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Cataloguing Training

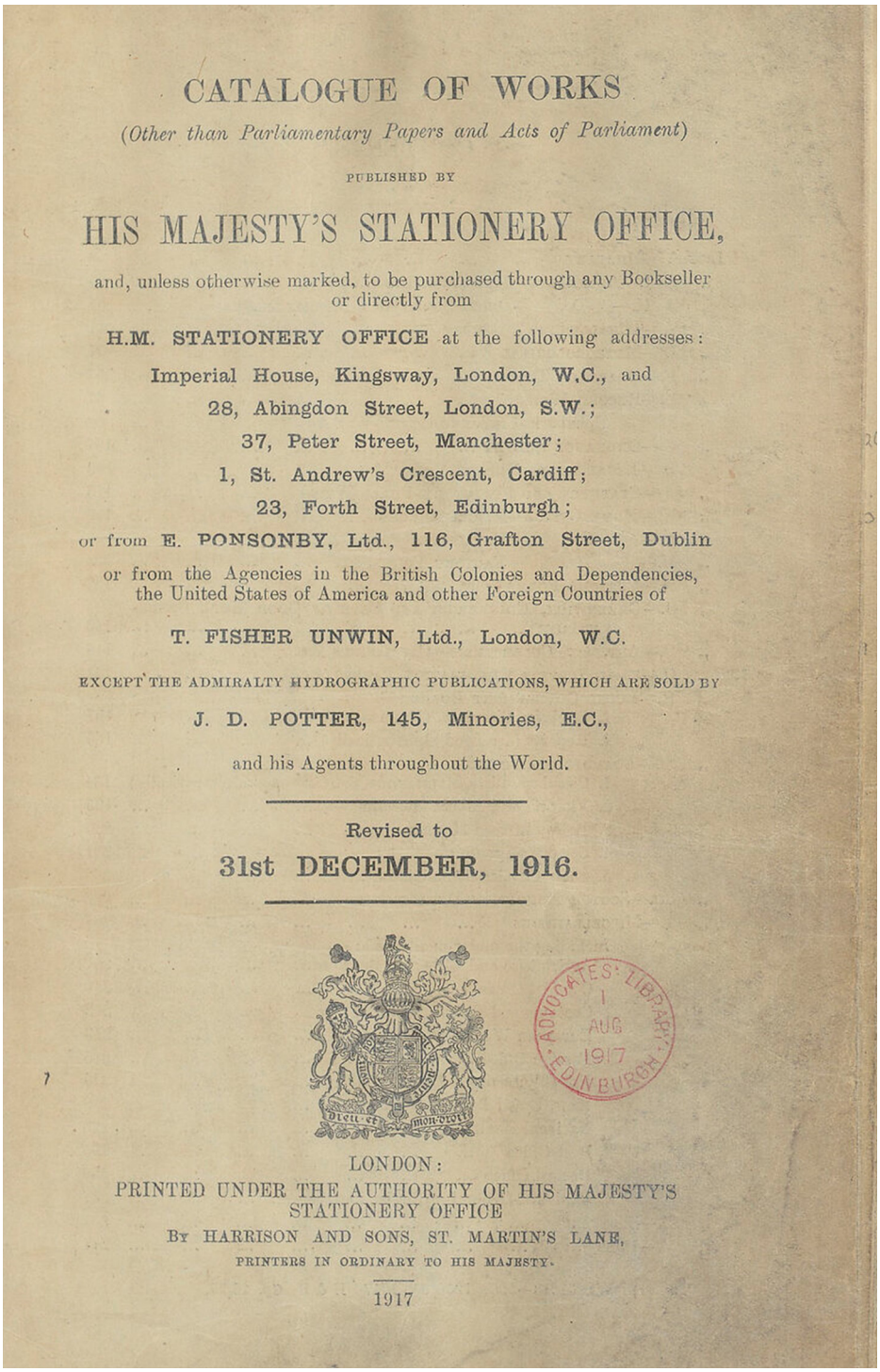
Learning to catalogue takes time and can be an overwhelming process if rushed. There are various standards and procedures to follow, from international to in-house, plus different material types and becoming familiar with complex Library Management Systems. It takes time and effort to train someone to the point where they can be let loose to describe Library collections.

But what happens when we cannot do this?

Adapting to Covid – Working from Home

When the Covid pandemic began in 2020, our cataloguers had never worked from home before. We were all based onsite with PCs and predominantly worked with physical items in hand. When we initially had to adapt to Working from Home, most staff just had their own personal devices and were not able to access our usual cataloguing systems.

So – how could we continue to work?



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(Other than Parliamentary Papers and Acts of Parliament)

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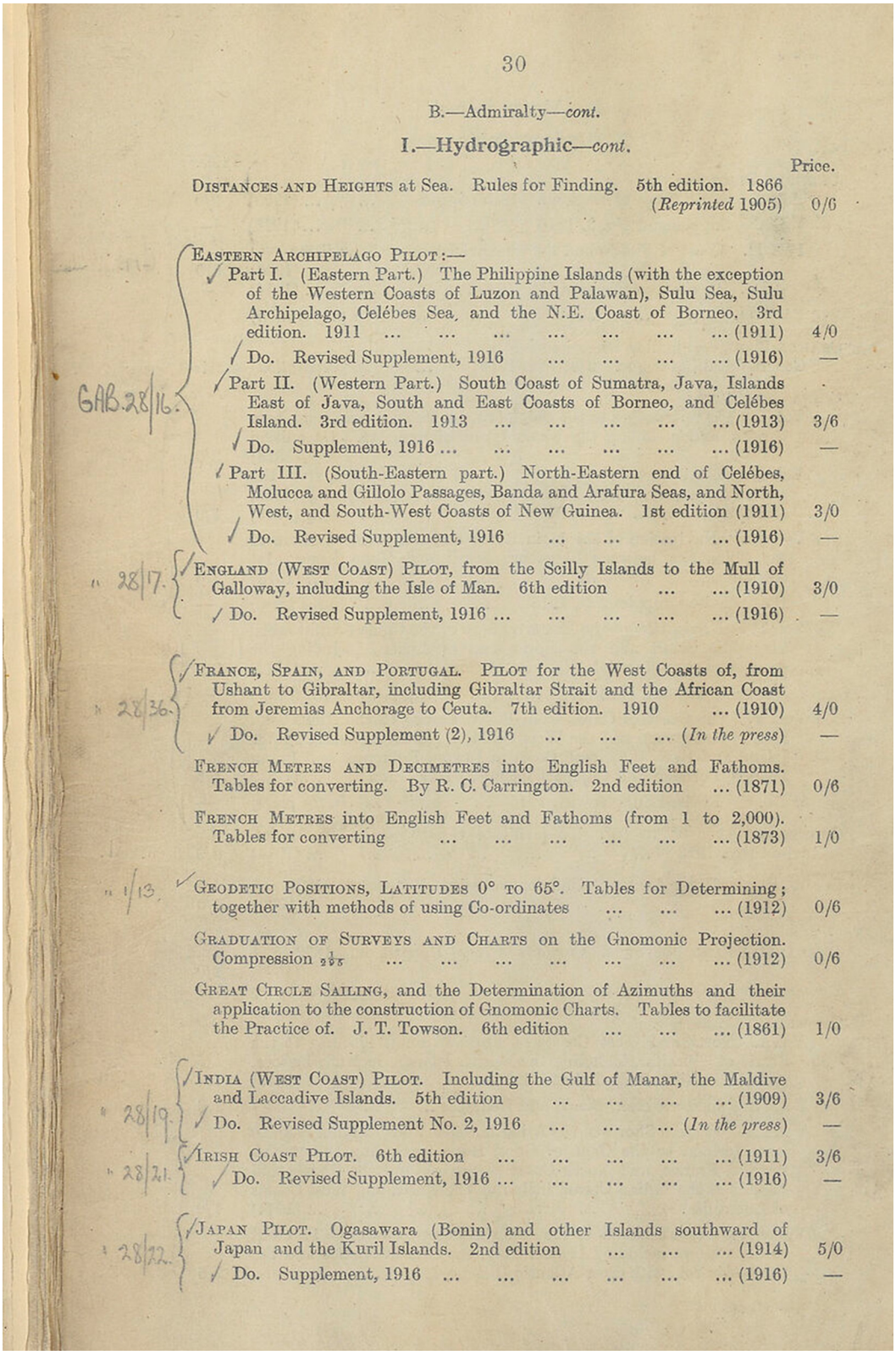
1917

Figure 1: Title page from HMSO catalogue of 1917 (HMSO ©1917)

HMSO Catalogues

Prior to the pandemic, the National Library of Scotland had digitised their thirty-nine volumes of Her/His Majesty's Stationery Office (HMSO) catalogues which give bibliographical informational about HMSO publications from 1916 to 1980.



30

B.—Admiralty—*cont.*

I.—Hydrographic—*cont.*

	Price.
DISTANCES AND HEIGHTS at Sea. Rules for Finding. 5th edition. 1866 (*Reprinted* 1905)	0/6
EASTERN ARCHIPELAGO PILOT:—	
Part I. (Eastern Part.) The Philippine Islands (with the exception of the Western Coasts of Luzon and Palawan), Sulu Sea, Sulu Archipelago, Celébes Sea, and the N.E. Coast of Borneo. 3rd edition. 1911 ... ... (1911)	4/0
Do. Revised Supplement, 1916 ... ... (1916)	—
GAB.28/16. Part II. (Western Part.) South Coast of Sumatra, Java, Islands East of Java, South and East Coasts of Borneo, and Celébes Island. 3rd edition. 1913 ... ... (1913)	3/6
Do. Supplement, 1916 ... ... (1916)	—
Part III. (South-Eastern part.) North-Eastern end of Celébes, Molucca and Gillolo Passages, Banda and Arafura Seas, and North, West, and South-West Coasts of New Guinea. 1st edition (1911)	3/0
Do. Revised Supplement, 1916 ... ... (1916)	—
" 28/17. ENGLAND (WEST COAST) PILOT, from the Scilly Islands to the Mull of Galloway, including the Isle of Man. 6th edition ... ... (1910)	3/0
Do. Revised Supplement, 1916 ... ... (1916)	—
" 28/36. FRANCE, SPAIN, AND PORTUGAL. PILOT for the West Coasts of, from Ushant to Gibraltar, including Gibraltar Strait and the African Coast from Jeremias Anchorage to Ceuta. 7th edition. 1910 ... (1910)	4/0
Do. Revised Supplement (2), 1916 ... ... (*In the press*)	—
FRENCH METRES AND DECIMETRES into English Feet and Fathoms. Tables for converting. By R. C. Carrington. 2nd edition ... (1871)	0/6
FRENCH METRES into English Feet and Fathoms (from 1 to 2,000). Tables for converting ... ... (1873)	1/0
" 1/13. GEODETIC POSITIONS, LATITUDES 0° TO 65°. Tables for Determining; together with methods of using Co-ordinates ... ... (1912)	0/6
GRADUATION OF SURVEYS AND CHARTS on the Gnomonic Projection. Compression $\frac{1}{25}$ ... ... (1912)	0/6
GREAT CIRCLE SAILING, and the Determination of Azimuths and their application to the construction of Gnomonic Charts. Tables to facilitate the Practice of. J. T. Towson. 6th edition ... ... (1861)	1/0
" 28/19. INDIA (WEST COAST) PILOT. Including the Gulf of Manar, the Maldive and Laccadive Islands. 5th edition ... ... (1909)	3/6
Do. Revised Supplement No. 2, 1916 ... ... (*In the press*)	—
" 28/21. IRISH COAST PILOT. 6th edition ... ... (1911)	3/6
Do. Revised Supplement, 1916 ... ... (1916)	—
" 28/22. JAPAN PILOT. Ogasawara (Bonin) and other Islands southward of Japan and the Kuril Islands. 2nd edition ... ... (1914)	5/0
Do. Supplement, 1916 ... ... (1916)	—

Figure 2: sample page from HMSO catalogue, with shelfmarks pencilled in (HMSO ©1917)

Historically the items listed were not individually catalogued – a shelf mark would be handwritten in each catalogue against each item held by the National Library of Scotland (NLS). These catalogues were only available in the Reading Rooms to be consulted, and items consequently requested.

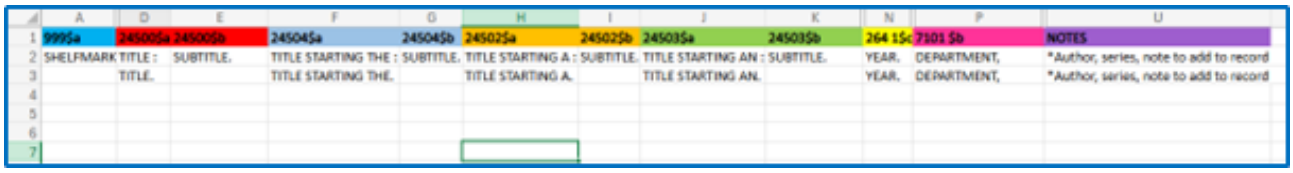
While having digitised images of the HMSO catalogue available could be useful to readers, making individual records for each publication in our own catalogue would make these items much more accessible. This would allow readers to request specific items before being onsite, which became more crucial with limited Reading Room access due to Covid restrictions.

From each listing in the HMSO catalogue, there was enough information to create an adequate catalogue record without the item in hand. There was a publisher (HMSO), place of publication (London), the department that had issued the publication (from the section title of the catalogue) as well as the title and date of publication. A unique extract code could also be added to all these records so they could be further enhanced in the future if required.

Use of spreadsheets

The next challenge was overcoming the issue of staff having a variety of electronic devices without access to our usual Library Management system, Alma. The solution was for everyone to use spreadsheets instead – Alma allows the import of specially formatted spreadsheets[1] to create live catalogue records with associated holdings and items.

Two types of spreadsheet template were created – one for simple metadata creation that any member of staff could use and one for staff with prior cataloguing experience who felt comfortable adding additional metadata included in the HMSO entry.



	A	D	E	F	G	H	I	J	K	N	P	U
1	999$a	24500$a	24500$b	24504$a	24504$b	24502$a	24502$b	24503$a	24503$b	264 1$c	7101 $b	NOTES
2	SHELFMARK	TITLE :	SUBTITLE.	TITLE STARTING THE :	SUBTITLE.	TITLE STARTING A :	SUBTITLE.	TITLE STARTING AN :	SUBTITLE.	YEAR.	DEPARTMENT,	*Author, series, note to add to record
3		TITLE.		TITLE STARTING THE.		TITLE STARTING A.		TITLE STARTING AN.		YEAR.	DEPARTMENT,	*Author, series, note to add to record
4												
5												
6												
7												

Figure 3: Simple spreadsheet template, with example data in rows 2 and 3

Each item is described in an individual row with columns filled in as required. As the spreadsheet is designed to map into Alma, the column headings translate to specific MARC fields with indicators and subfields:

- *999$a* – becomes the shelfmark in Alma
- *24500$a / 24500$b* – Title and subtitle with no initial article
- *24504$a / 24504$b* – Title and subtitle with initial article ‘the’

[1] https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/040Resource_Management/060Record_Import/075Importing_Records_with_CSV_or_Excel_Files

- *24502$a / 24502$b* – Title and subtitle with initial article 'a'
- *24503$a / 24503$b* – Title and subtitle with initial article 'an'
- *264 1$c* – Year of publication
- *7101 $b* – Government Department

However, how would someone with no cataloguing background know that the column 24500$a would mean this is the place to enter the title? Moreover, the data had to be strictly entered to create the correct fields with specific punctuation to import correctly into Alma.

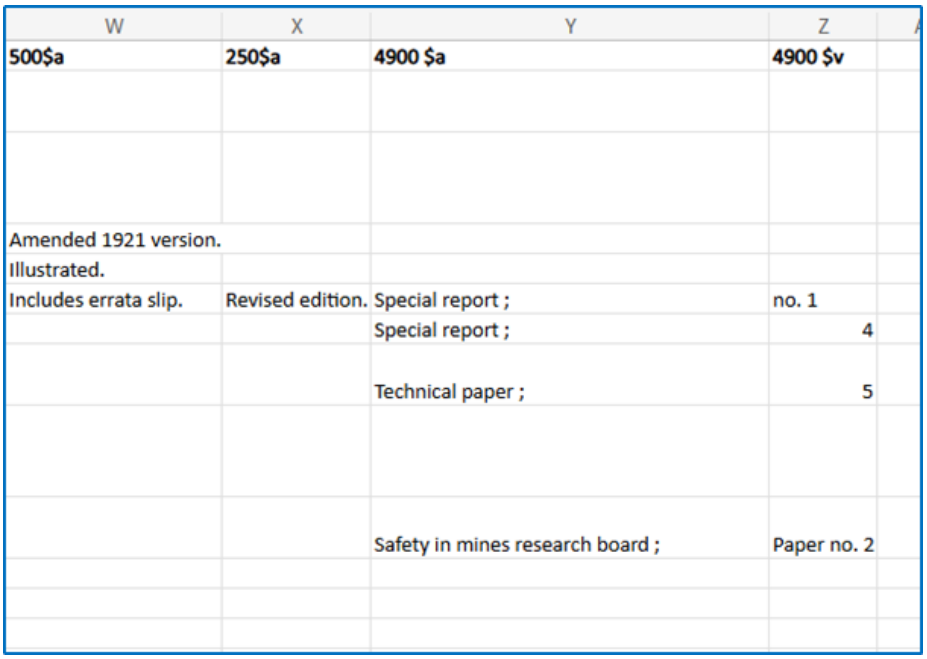
We therefore needed to make the instructions as clear as possible, with the recognition that some staff were completely new to the jargon of cataloguing. The spreadsheet was colour coded and matched to guidance which explained each column with example data. Any data which was consistent for each item (such as the place of publication - London) was added in bulk to the spreadsheet and then hidden. This minimised manual data entry and allowed staff to concentrate solely on adding unique data.

The trickiest section of the spreadsheet was inputting the title – staff needed to think about if there was a title and subtitle or just a title, and whether this title started with an initial article or not. These elements can change how the title displays to our end users – and with no subjects or keywords, the accuracy of the titles was vital for the discoverability of the records!

Consequently, the spreadsheet had different 'sets' of 245 columns. Red for no initial articles, blue for a title starting with the, and so on. It was vital that only one 'kind' of 245 was filled out for each row – Alma would not be happy with a record which tried to add multiple main titles! (Of course, we did learn later how to automatically do this in Alma, but that came many months into the project.)

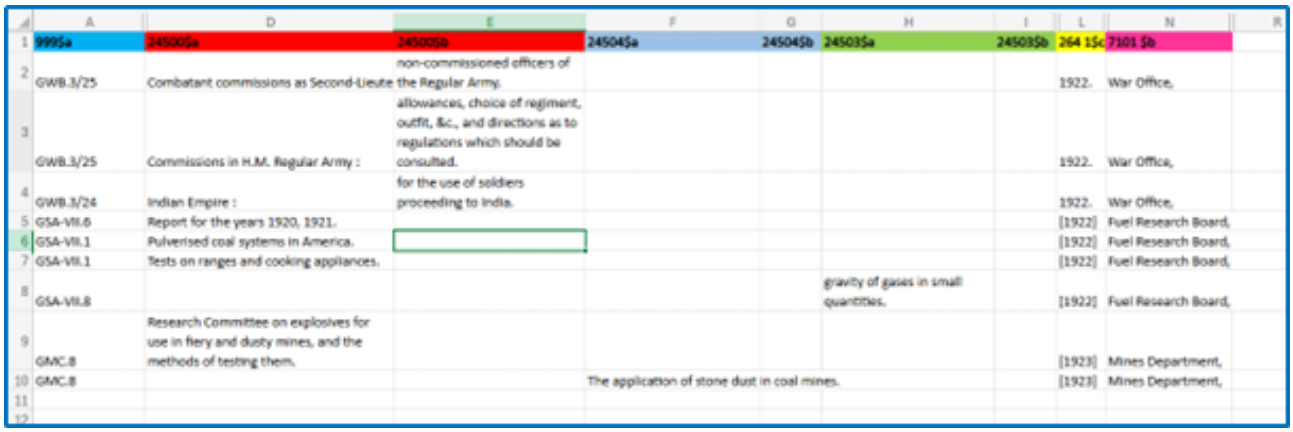
To make this as straightforward as possible, online training sessions were held with all staff on the project as well as a Teams chat to share tips and ask questions. People could also add notes to each item they added to the spreadsheet if they required a second opinion. Very quickly, the more experienced cataloguers were able to advise others and double-checked spreadsheets before import.

Moreover, as confidence and knowledge grew, more staff switched to using the advanced Excel template where they could use additional columns to add extra data supplied from the HMSO catalogue. This included edition statements and series information.



W	X	Y	Z
500$a	250$a	4900 $a	4900 $v
Amended 1921 version.			
Illustrated.			
Includes errata slip.	Revised edition.	Special report ;	no. 1
		Special report ;	4
		Technical paper ;	5
		Safety in mines research board ;	Paper no. 2

Figure 4: Columns in advanced spreadsheet



	A	D	E	F	G	H	I	L	N
1	999$a	24500$a	24500$b	24504$a	24504$b	24503$a	24503$b	264 1$c	7101 $b
2	GWB.3/25	Combatant commissions as Second-Lieute	non-commissioned officers of the Regular Army.					1922.	War Office,
3	GWB.3/25	Commissions in H.M. Regular Army :	allowances, choice of regiment, outfit, &c., and directions as to regulations which should be consulted.					1922.	War Office,
4	GWB.3/24	Indian Empire :	for the use of soldiers proceeding to India.					1922.	War Office,
5	GSA-VII.6	Report for the years 1920, 1921.						[1922]	Fuel Research Board,
6	GSA-VII.1	Pulverised coal systems in America.						[1922]	Fuel Research Board,
7	GSA-VII.1	Tests on ranges and cooking appliances.						[1922]	Fuel Research Board,
8	GSA-VII.8					gravity of gases in small quantities.		[1922]	Fuel Research Board,
9	GMC.8	Research Committee on explosives for use in fiery and dusty mines, and the methods of testing them.						[1923]	Mines Department,
10	GMC.8			The application of stone dust in coal mines.				[1923]	Mines Department,
11									
12									

Figure 5: Completed spreadsheet ready for import

Importing spreadsheets to Alma

The next stage was to create a specific import profile[2] for the project in Alma. This would bulk upload the Excel spreadsheets and create MARC records with dedicated holdings and items. To further enhance this data, a set of normalisation rules[3] was created to run alongside the ingest. This added in some specific RDA elements (such as 336-338 fields), added the project extract code HMSO to each record and converted fields so they were MARC compliant.

[2] https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/040Resource_Management/060Record_Import/020Managing_Import_Profiles

[3] https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/Metadata_Management/016Working_with_Rules/020Working_with_Normalization_Rules

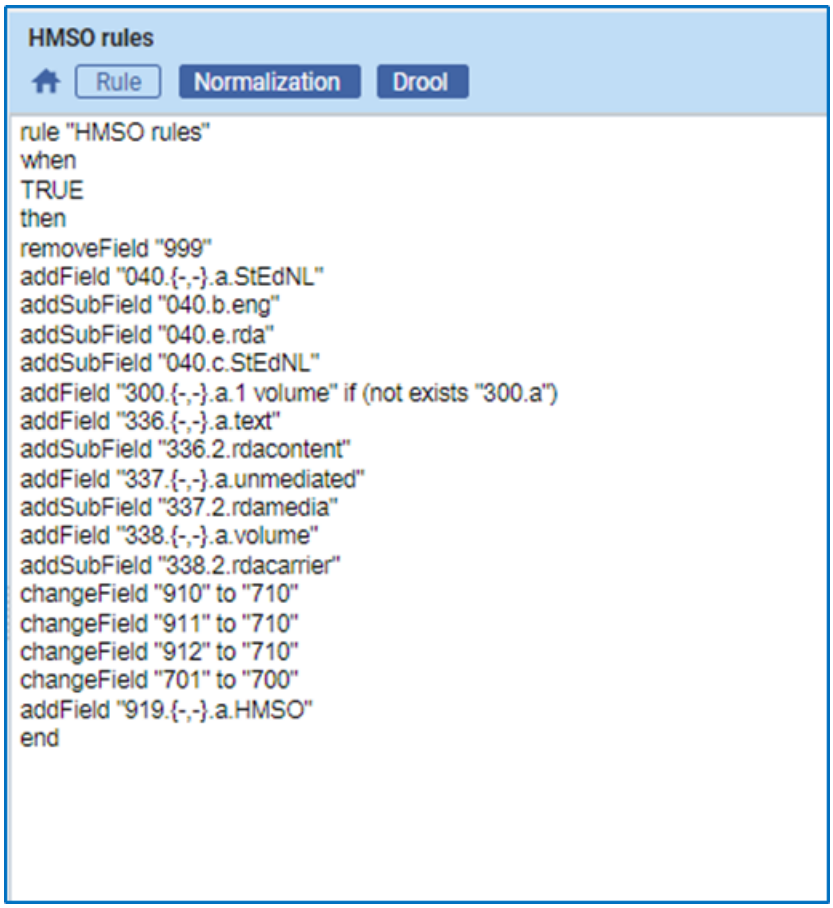


Figure 6: Initial normalisation Rules to enhance spreadsheet data, see end of article for the current version

One quirk with Excel import to Alma is that each column number needed to be unique – if more than one column had the same configuration, these would become merged in the Alma record. A common practice was to have more than one corporate body, thus more than one 710 field. We therefore used random field numbers in Excel and converted these when the record was created.

After some trial and error, we eventually ended up with a smooth routine and created standard records which allowed these items to be individually retrieved.

N	O	P	Q	R	S
7101 $b	**7101 $e**	**9101 $a**	**9101 $b**	**9111 $a**	**9111 $b**
. Standing Advisory Committee on Trunk Road Assessment.	issuing body.	Great Britain.	Her Majesty's Stationery Office.	Great Britain.	Department of Transport.

Figure 7: Spreadsheet with multiple corporate bodies using different field numbers

LDR	00526nam a22001697i 4500
001	99116105443604341
005	20201207092527.0
008	201207s1921 enk f000 0 eng d
040	__ |a StEdNL |b eng |e rda |c StEdNL
245	00 |a Handbook of bayonet training for His Majesty's Fleet.
264	_1 |a London : |b His Majesty's Stationery Office, |c [1921?]
300	__ |a 1 volume
336	__ |a text |2 rdacontent
337	__ |a unmediated |2 rdamedia
338	__ |a volume |2 rdacarrier
710	1_ |a Great Britain. |b Admiralty, |e issuing body.
919	__ |a HMSO

Figure 8: Ingested record in Alma

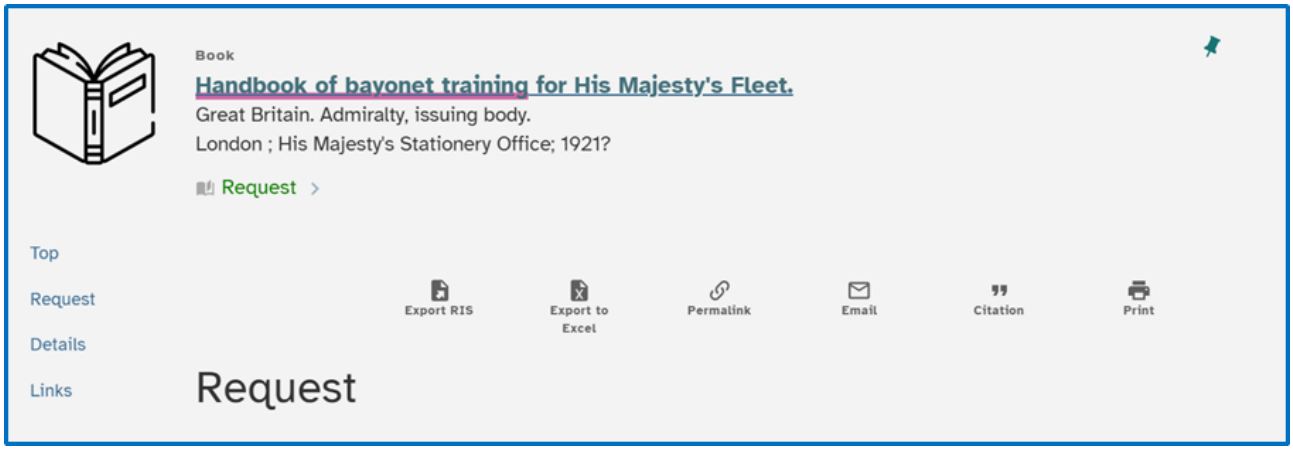


Figure 9: Record in Library Search for readers to request

Lessons Learned

It was a steep learning curve for all staff, maybe even more so for staff who were used to cataloguing directly into Alma rather than being one step removed! Everyone had different comfort levels with Excel spreadsheets. A common irritant was the size of the spreadsheets as this work required a lot of columns and was easier for some people to navigate than others depending on the screen size of their device.

Another frustration was not being able to access the item at the shelf to double check any confusion over the description in the HMSO catalogue. Luckily, we were able to flag such items so they could later be checked when back onsite.

One of the most complicated issues to overcome was the import routine to Alma. Using the Alma Sandbox, spreadsheets were initially loaded, and many were coming back with partial or full errors. We uncovered the main reasons for failure were having blank columns in the middle of the spreadsheet and rows where multiple 245 titles had accidentally been added. This eventually became a core task in the double checking of spreadsheets (as well as for typos and punctuation) before being sent for ingest.

Successes

The project quickly grew to include staff from across the Library who worked over many months to make over 30,000 items available. It is a project that quite possibly would never have been feasible without the sudden need for everyone having to work from home.

Not only has it widened the cataloguing experience of those who previously worked on mainly physical items, it gave staff across the Library some practical metadata experience. It helped to demystify how items end up on the catalogue and the standards that are used.

Ongoing Excel projects

The most significant success has been continuing to use Excel for other projects, even when back onsite and using Alma. These spreadsheets are great for projects where there are many items with a similar layout, so the data entry is routine (such as with reports from public bodies). This consequently frees up the time of trained cataloguers to focus on more complicated cataloguing tasks which don't necessary lend themselves well for spreadsheets.

As time has progressed, the normalisation rules employed on these projects have also become more sophisticated (see below). We are now able to detect if there are articles in the title field (therefore only one 245 column is needed in Excel) as well as add the correct punctuation on import. This means that the spreadsheet users can spend more time entering the data without these concerns, making the workflow more efficient.

Most importantly, having all cataloguing staff comfortable with using Excel for metadata work means we have an immediate backup plan for any network issues planned or unplanned. We can now carry on cataloguing, whatever happens!

Improved normalisation rule(s)

```
rule "HMSO rules"
when
TRUE
then
removeField "999"
addField "040.{-,-}.a.StEdNL"
addSubField "040.b.eng"
addSubField "040.e.rda"
addSubField "040.c.StEdNL"
changeSecondIndicator "245" to "4" if (exists "245.{*,*}.a.The *")
changeSecondIndicator "245" to "3" if (exists "245.{*,*}.a.An *")
changeSecondIndicator "245" to "2" if (exists "245.{*,*}.a.A *")
addField "300.{-,-}.a.1 volume" if (not exists "300.a")
addField "336.{-,-}.a.text"
addSubField "336.2.rdacontent"
addField "337.{-,-}.a.unmediated"
addSubField "337.2.rdamedia"
addField "338.{-,-}.a.volume"
addSubField "338.2.rdacarrier"
changeField "910" to "710"
changeField "911" to "710"
changeField "912" to "710"
changeField "701" to "700"
addField "919.{-,-}.a.HMSO"
end


rule "Add punctuation"
when
TRUE
then
suffix "100.a" with "." if (not exists "100.a.*\\\\.")
suffix "700.a" with "." if (not exists "700.a.*\\\\.")
suffix "710.a" with "." if (not exists "710.a.*\\\\.")
suffix "500.a" with "." if (not exists "500.a.*\\\\.")
suffix "264.a" with " :" if (not exists "264.a.*:")
suffix "264.b" with "," if (not exists "264.b.*,")
suffix "264.c" with "." if (not exists "264.c.*\\\\.")
end
```

```
rule "Fix punctuation"
when
(exists "245.a.*" ) and (exists "245.b.*")
then
suffix "245.a" with " :" if (not exists "245.a.* :")
suffix "245.b" with "." if (not exists "245.b.*\\\\.")
end


rule "Fix punctuation 2"
when
(exists "245.a.*") and (not exists "245.b.*")
then
suffix "245.a" with "." if (not exists "245.a.*\\\\.")
end


rule "Change 245 first indicator"
when
(exists "100.a.*")
then
changeFirstIndicator "245" to "1"
end
```