

Millennium ILL changes to support BLDSS

Background

In 2011/12 the British Library Document Supply Service (BLDSS) has introduced a new computer system for processing ILL requests. The new system is also named BLDSS. The new system can receive requests in the long-established ARTEmail format, but requires much closer adherence to the recommended field order for requests to be handled successfully. Innovative has agreed to amend Millennium ILL to improve the generation of ARTEmail requests.

By the end of 2012 the BL intends to introduce a new web services API for handling requests. Systems suppliers are strongly encouraged to alter their systems to use the new API which will allow much closer integration of services. Although the API has not been finalised, the first draft has been released for comment (27th July 2012). One crucial point is that separate data elements will be passed in separate fields in the web service messages, and so conflation of field content must be avoided where possible. These proposals therefore also seek to prepare the ground for future adoption of the BLDSS web service API.

One of the consequences is that more fields will be required in the Millennium request record than have hitherto been available. Innovative has agreed to add a further six fields. This may be just about sufficient, but we should consider whether future disruption might be avoided by adding even more fields at this stage.

Assumptions

1. It is assumed that all existing fields will continue to behave the same way in respect of the submission of requests by the users, sending of requests to suppliers, etc. If the behaviour of any existing fields were to be changed it would require much wider consultation among the Millennium user base. Since the BLDSS functionality is very important to the UK community but not to other users, it is vital to avoid changes that would affect other users.
2. The fields which are to be sent to the BL in ARTEmail messages must be located via the same field tags from one Millennium system to another.
3. It is assumed that the field tags will be taken in a fixed and predictable order for generating the request forms for submission by patrons. At present libraries have no means of changing the order or the presentation of the forms. While changes to enable this are highly desirable, it is assumed that this is beyond the scope of the current work.
4. Similarly the same field order will be applied when sending e-mails to other suppliers from within Millennium. Again, greater customisation of the e-mails generated by Millennium ILL would be very much welcomed by all customers, not just in the UK, but this is assumed to be beyond the scope of the current work.

Principles

1. The ordering of the fields for each request type follows as closely as possible the suggested default order in the Innovative Getting Started Manual. It is hoped that this will avoid too much disruption to UK Millennium sites as we are likely to have all taken that order as a starting point when customising our systems. This also avoids causing problems with features such as the button to search the catalogue for the item (which searches based on a particular field dependant on the request type) and the rules regarding mandatory fields.

British Library ARTEmail preferred field order

The latest published guidance from the BL may be found in the [November 2011 guide](#) on the web. A summary is given in the table below. Note that the guidance is very sparse when it comes to examples. It is also very unclear whether lines may be wrapped (which is the assumption taken by most library management systems). In some cases two items of data are given on one line (e.g. "Article title and/or first author") where most systems would put

them on two separate lines. In other cases (for example "Year, Volume, Part, Pages") the data very definitely is preferred to be transmitted on one line of the request.

Line	Journal articles	Book loans	Conference papers
1	Journal title	Book title	Title of conference or publication (could be two fields)
2	Year, Volume, Part, Pages	Author / editor	Date, Venue (or place), Sponsoring organisation
3	Article title (first 4 or five words) and/or first author	Publisher / Place of Publication	Year, Volume, Part, Pages
4	ISSN / BL shelfmark	Year / Volume / Part / Edition	Title of paper (first 4 or 5 words) and/or first author
5		ISBN / BL shelfmark	ISBN / BL shelfmark

The guidance gives no examples of book chapter requests. I sought clarification from the British Library and received the following:

Dear Matthew,

We have discussed these issues and our preferred order for book chapters is:

TXABC54321 LOAN	
WAR AND PEACE	Book title
TOLSTOY, L	Book author
1899 1st edn	Year + edition if known
CHAPTER 'THE FRENCH IN AUSTERLITZ'	Chapter title
BY TURGENEV, N	Chapter author
PP 323-354	Chapter pages
DENT PUBLISHERS	Publisher
9785647653213	ISBN/Shelfmark

Regarding other types of material, we suggest that the following guidelines are used

TX line
Item title
Item author/sponsor/composer/corporate author
Year
Item report/reference number
Section details
publisher
Shelfmark/issn/isbn/other number

Kind regards,

Brian Sherwood
Customer Services
Operations and Services
The British Library

I am going to seek clarification as to whether the words "CHAPTER", "BY" and "PP" are to be included in the request.

Proposed standard bibliographic field order for ARTEmail libraries

Q number	Field code	HTML form	Book	Journal	Book chapter	Proceedings	Theses*	Gov't. report**	Tech. report**
Q1	a	main0	Author	Article author	Chapter author	Sponsoring organisation	Author	Sponsoring agency	Sponsoring agency
Q2	b	main1	Book title	Article title	Chapter title	Title of conference or publication	Thesis title	Report title	Report title
Q3a	c	publ0	Publisher	Journal title	Book title	Venue and date of conference	Institution	Publisher	Publisher
Q3b	d	publ1	Year of publication	Year	Book author	Paper title	Degree	Year	Year
Q3c	e	publ2	Volume (if applicable)	Volume	Pages	Paper author	Year	Report number	Report number
Q3d	f	publ3	Edition	Part	Publisher	Pages	(spare)	(spare)	(spare)
Q3e	g	publ4	(spare)	Pages	Year of publication	Publisher	(spare)	(spare)	(spare)
Q3f (new)	m (proposed)	publ5	(spare)	(spare)	Volume	Year of publication	(spare)	(spare)	(spare)
Q3g (new)	n (proposed)	publ6	(spare)	(spare)	Edition	Volume	(spare)	(spare)	(spare)
Q3h (new)	o (proposed)	publ7	ISBN	ISSN	ISBN	ISSN/ISBN	(spare)	ISBN/ISSN	ISBN/ISSN
Q4	h	main3	Cited in	Cited in	Cited in	Cited in	Cited in	Cited in	Cited in
Q5a	i	info0							

Q5b	j	info1							
Q5c	k	info2							
Q7 (new)	p (proposed)	info3							
Q8 (new)	q (proposed)	(not on form)							
Q9 (new)	r (proposed)	(not on form)							

Notes:

1. Field code "I" is currently used for the "history notes" field, which allows multiple notes to be added to a single request. The "history notes" are internal-only and not transmitted either to the supplier or the patron.
2. The forms also optionally contain a box where the user can specify a date beyond which the item is not required. This is handled via the fixed fields in the record.
3. Although the BL's November 2011 ARTEmail guidance lists the Part field for book requests, this field is not included in the new API proposals for book requests. We could retain it by moving the Edition field down to Q3e if it is thought desirable, and libraries which did not wish to use it could exclude Q3d from their form prompts. The Part field is very rarely required (for example, where a volume is unexpectedly too large and is published in two parts, such as some volumes of Halsbury's Statutes) but in all probability users would just tag the information onto the end of the volume field anyway.
4. The Venue and Date of conference for the proceedings request type are given separate fields in the new API proposals. It might be advisable to split these, in which case a further Q3i (publ8) field would be needed. Alternatively Innovative could implement the new API non-conformantly by placing both pieces of information in the Venue field, or intelligently by matching the year or date statement and splitting the field like that. Or we could extend into Q5a for this request type, but it would have the distinct disadvantage of being placed awkwardly in the ordering when the user is submitting the request.
5. The book chapter field order looks rather strange, having the chapter author and title followed not by the book author and title but having the book title preceding the author. This citation order is suggested by the MHRA citation guide but none of the other major citation styles use it. It would be possible to have the book chapter and book author the other way round, but only if we all agreed to the change. Note that the "search the catalog" button searches on Q3a for this request type, so it would end up searching the title index for the book author. On the whole, therefore it would be much better to stick to Innovative's default field ordering here.
6. The place of publication is omitted from all request types, and does not appear in the BL's new API draft. Libraries would be free to have the relevant prompts relabelled as "Publisher or place" if desired, and cope with the fact that it would be transmitted to the BL as though it were the publisher. Users are likely to enter it in the Publisher field anyway for old citations.
7. I would suggest that the fields labelled "(spare)" also be sent to the BL via ARTEmail if a library has chosen to have a prompt set up for the corresponding request type. This allows libraries to add extra fields if required. Libraries would have to recognise that further disruption might be needed if the new BLDSS API is adopted in the future.

* The BL does not accept requests for UK theses, only US theses, and the ARTEmail guide does not provide guidance about thesis requests. This column merely shows the standard Innovative fields from the Getting Started Manual.

** The BL does not recognise a separate request type for government or technical reports, neither in its ARTEmail

guidance nor in the draft API document. It is suggested that libraries require users to use the other forms instead if requests are to be transmitted to the British Library as the field order is more likely to suit the needs of BLDSS. The fields shown under Government Report and Technical Report deviate from the Innovative defaults by splitting the publisher and the year into separate fields.

Supplementary fields in the request

At present Q4 (by default the "Cited in" field) is available in the user request form but is not transmitted to the British Library or to other suppliers. At one stage in the past the field was cleared after sending a request, but this possible does not occur any more.

The other questions, 5a to 5c, behave much like Q1, Q2, Q3a-e as far as non-BL suppliers are concerned. That is, the field prompt is reproduced in the request email to the supplier, along with the field value. Libraries have been free to choose any prompts they wish for these fields. Because the fields appear after the "Cited by" field in the form, it is best not to use them for bibliographic information about the item being requested, as it does not give a coherent order to the forms, nor to the emails to the suppliers.

So aside from Q4, we have three fields to play with, all of which may appear in the user's request form and all of which are passed on to the supplier. These could be used for things like:

- the format preferred, e.g. electronic delivery, photocopy rather than loan, etc.
- any additional information to help identify the book

Aside from those, however, we struggle to find any other uses. There is, however, a need to provide several fields which either do not appear in the form, or do not get passed to suppliers, or both:

	Transmitted to supplier	Not transmitted to supplier
Received from patron via form	<ul style="list-style-type: none">• format preference, e.g. electronic; photocopy; loan• additional information to identify the item <p>The format preference might be edited by staff prior to passing the request to a supplier, in accordance with local policy</p> <p>The additional information might be held to be unnecessary, as users can put this information in Q4, and library staff can then transfer anything relevant to a field which is transmitted to suppliers.</p> <p>Fields Q5a - Q5c are already suitable for these purposes.</p>	<ul style="list-style-type: none">• where to deliver the request to, e.g. library branch to collect from• copyright declaration• general notes to staff <p>General notes from the patron to staff could be appended to the "Cited in" field if that was relabelled to encourage such use.</p> <p>For auditing purposes it is good to have the copyright declaration in a separate field.</p>

<p>Not received from patron (i.e. field exists, but is not present on the web request forms)</p>	<ul style="list-style-type: none"> • account number (used by UK libraries for reconciliation via British Library) • request number (used by UK libraries for reconciliation via British Library) • voucher numbers (used in some UK interlending co-operatives) • shelfmark of the item in the supplier's catalogue • other notes to the supplier <p>It is already possible to type a note to a supplier at the point of requesting the item. This message will be inserted at the top of the e-mail but is not stored in the request. Some of the examples above would be better stored more permanently as the information would be needed again when trying a different supplier after the first one declined to supply.</p> <p>Most of the fields in this box could be accommodated by a single field, to be entered by ILL staff and transmitted to potential suppliers.</p>	<ul style="list-style-type: none"> • general staff notes • billing or internal accounting information <p>General staff notes, not transmitted to the supplier, can be added via the "history notes" field (field tag "I") but it is sometimes handy for important notes to go in a separate, more prominent field.</p>
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It is therefore proposed that the new fields behave as follows. I have shown Q4 and Q5a-Q5c in the following table also, and it is assumed these will continue to behave as they do now.

	Transmitted to supplier	Not transmitted to supplier
Received from patron via form	Q5a, Q5b, Q5c	Q4, Q7
Not received from patron (i.e. field exists, but is not present on the web request forms)	Q8	Q9

It is recognised that having fields which exist in the ILL request for a particular request type, but which do not appear on the web request form used by patrons, is a new concept, though the "history notes" field with tag 'I' shows it is technically possible. Fields which are not transmitted to the supplier already exist in the form of Q4.

If Innovative cannot accommodate this aspect of the proposals, then I would suggest maintaining Q5a to Q5c as they are, and having Q7, Q8 and Q9 all behaving like Q4, conveying information to library staff which is not passed on to the supplier. Libraries could add "(staff use only)" to the prompts to explain their presence on the public forms, or use Javascript or maybe CSS to hide the form elements which are not wanted. But on the whole it would be very much better if fields which are suppressed from the public form but which exist internally for staff could be accommodated.

Format of ARTEmail messages

The actual fields sent to the British Library via ARTEmail would be as follows (using the field group tags assigned above). The fields labelled "(spare)" are those which are not allocated to any particular piece of data in the format in question, but they would be appended to the ARTEmail message if the library chose to activate the field. This gives greater flexibility for the future. I have tried to divide up the spare fields so that some appear before and some after the ISBN. This is to try to cater for unforeseen requirements, particularly in respect of technical and government reports.

Where more than one field appears on a line, the fields will be separated by a single space.

If a field prompt is not activated for the request type in question, or if the prompt does appear in the form but the field itself is blank for this request, then the line will not appear in the e-mail, and the space will be closed up. There must be no blank lines in the middle of an ARTEmail request.

All lines will be limited to 40 characters. If the material for a line is too long for 40 characters, it should be split at the preceding word break and continue on an extra line. If there is no suitable word-break (e.g. long names of chemicals) then the word should be broken after 40 characters.

Format	Book	Journal	Book chapter	Proceedings	Theses	Gov't. report	Tech. report
Line 1	b	c	c	b	b	b	b
Line 2	a	d e f g	d	c**	a	a	a
Line 3	c	b	g m n	a	c	c	c
Line 4	d e f*	a	b	m n f	d	d	d
Line 5	g (spare)	m (spare)	a	d	e	e	e
Line 6	m (spare)	o	e	e	f (spare)	f (spare)	f (spare)
Line 7	o	n (spare)	f	g	g (spare)	g (spare)	g (spare)
Line 8	n (spare)		o	o	m (spare)	o	o
Line 9					n (spare)	m (spare)	m (spare)
Line 10					o (spare)	n (spare)	n (spare)

* or "d e f g" if we include the Part field in the book request format.

** would need adjusting if four new bibliographic fields were added, so that date and venue could be split into separate fields.

Web request forms

At present the web-based forms for users to request ILLs list the fields straightforwardly in this order: Q1, Q2, Q3a, Q3b, Q3c, Q3d, Q3e, Q4, Q5a, Q5b, Q5c, Q6. If enabled, Q6 is the question asking when the item is required by. It is proposed that the new ordering be Q1, Q2, Q3a, Q3b, Q3c, Q3d, Q3e, Q3f, Q3g, Q3h, Q4, Q5a, Q5b, Q5c, Q6, Q7. This doesn't translate into such a straightforward field group tag ordering, but there does not seem to be any way of avoiding this. Q8 and Q9 would not appear on the form, even if enabled on the system.

Other uses of the ILL request record

The request records are used for creating temporary items for the circulation system, and the Millennium ILL module

can also generate e-mails to users when required. In each case the system currently uses fields a-g (Q1, Q2, Q3a-e) to describe the material being requested. The system should therefore be modified to add in the extra bibliographic fields, Q3f, Q3g, Q3h (proposed field group tags m, n, o) where these are in use, to make the system consistent and predictable in its behaviour.

Configuration requirements

Libraries using ARTEmail would need to follow the standard field allocation for Q1, Q2, Q3a-h as listed above.

Current UK Millennium sites will need a brief period of notice before changing over to allow reports to be run and to arrange for inbound OpenURL resolver linking to be configured for the new field order.

UK Millennium sites would be free to determine the wording of the prompts for all the bibliographic fields (for example, a site may prefer "Author of chapter" to "Chapter author", or "Notes to Library" instead of "Cited in").

Sites may choose to suppress certain of the fields for some request types. For example, it might be decided that the conference proceedings form was too long and that the Publisher and Volume fields were unnecessary. Sites would be free to choose to exclude certain fields from the system as they are now, but would have to accept that if they needed to convey the missing data to the British Library that they may not be able to do so in the recommended format.

UK sites will also wish to consider which of the new fields, Q7 to Q9, they will put into use, and whether to change the prompts for Q5a-c.

Sites offering the Technical Report and Government Report request types to users would need to configure the prompts to suit their needs, given there is no particular recommendation from the British Library for these types.

A sample implementation

Here is how the system might be configured for Sheffield Hallam, based on the request forms they currently have. This is just for illustration to see how the new fields might be used. I do not claim to understand what Sheffield Hallam's needs are for each piece of data.

Q number	Field code	HTML form	Book	Journal	Book chapter
Q1	a	main0	Author	Article author	Chapter author
Q2	b	main1	Book title	Article title	Chapter title
Q3a	c	publ0	Publisher	Journal title	Book title
Q3b	d	publ1	Year of publication	Year	Book author
Q3c	e	publ2	<Volume: could be suppressed>	Volume	Pages
Q3d	f	publ3	Edition	Part	Publisher
Q3e	g	publ4	(spare)	Pages	Year of publication
Q3f (new)	m (proposed)	publ5	(spare)	(spare)	Volume
Q3g (new)	n (proposed)	publ6	(spare)	(spare)	Edition

Q3h (new)	o (proposed)	publ7	ISBN	ISSN	ISBN
Q4	h	main3	Collect from Adsetts / Collegiate	Collect from Adsetts / Collegiate	Collect from Adsetts / Collegiate
Q5a	i	info0	Source of reference	Source of reference	Source of reference
Q5b	j	info1	Other useful information	Other useful information	Other useful information
Q5c	k	info2	*YOUR NAME		*YOUR NAME
Q7 (new)	p (proposed)	info3	Dept/Faculty/Year	Dept/Faculty/Year	Dept/Faculty/Year
Q8 (new)	q (proposed)	(not on form)			
Q9 (new)	r (proposed)	(not on form)			

Note: I am not clear what the "*YOUR NAME" fields are used for. It may not be appropriate to pass these on to the suppliers. The "Source of reference" has been put in Q5a because it usually does not cause any harm sending this on to suppliers, whereas the Adsetts/Collegiate field probably does not need to go to suppliers. At present Sheffield Hallam do not offer a volume number field for their book request form. They could continue not to have one by suppressing Q3c but still having the Edition field in Q3d.

This illustrates how it is going to be hard to satisfy all users perfectly, as some universities need to have several fields to be filled in by the user and not transmitted to the supplier. The proposals only allow for two as they stand, increased to four if it turns out not to be possible to have fields which exist but do not appear in the form. More flexibility (or more fields) in this area would help.

Other comments

Some sites have suggested that a "Series" field is useful for book requests. At Durham we would agree with this, and would probably choose to configure Q3e as series. It would be sent to the British Library before the ISBN but this is unlikely to cause problems in auto-matching as ISBNs are very distinctive.

Issues to resolve

1. Whether Innovative can support extra fields appearing in the forms as Q3f,g,h but with field codes beyond those of Q5a-c. In other words, do the web request forms have to be in strict field code order? If they do, we have a real problem as the bibliographic information does need to be in one block in the request forms, and we do not want to change the behaviour of Q4 which is currently not passed to suppliers.
2. Whether Innovative can introduce fields which have prompts within the staff client but do not appear on the forms (Q8 and Q9 above).
3. Whether Innovative is happy to restrict Q7 and Q9 so that, like Q4, the data are not transmitted in emails to suppliers. This would be highly advantageous as there are several current use cases for this type of field.
4. Whether to support the Part field in the book request format. It would appear in Q3d, with the Edition field moving to Q3e.
5. Whether to bite the bullet and introduce a further bibliographic field (Q3i, publ8) to allow the Date of conference and Venue of conference fields to be separated. This would make it easier to adopt the BLDSS web services API in the future, but would require seven new fields to be added instead of the six which Innovative have offered, and probably a relabelling of the suggested field group tags.

