



## **E4libraries Scoping Report – Update 2013**

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### **Author's Note**

In 2007-8, I authored a report for BIC and the e4libraries project. On re-reading the report I believe that it remains relevant almost exactly five years later in 2013, its recommendations and findings are still true and would be of benefit to libraries and other organisations seeking to improve their library service and reduce their costs. But there have of course been many changes over the last five years in many areas such as technology, standards, organisational structures etc. so the purpose of this update is to produce a new summary and point out key changes and relevant developments to enable librarians in 2013 to obtain value from the e4libraries project. As always, please feel free to raise issues or send feedback to the author at [simon.edwards@dial.pipex.com](mailto:simon.edwards@dial.pipex.com).

### **Introduction**

The e4libraries project seeks to encourage the library supply chain to embrace EDI and other useful technologies and to exploit these for maximum benefit. The library supply chain has already invested in EDI and is an enthusiastic user of RFID but more could be done by adhering to standards and by improving the interoperability between systems in order to deliver the benefits of these investments. Since the original report there has been considerable progress made in both EDI and RFID implementation and also dramatic growth in eBooks and other digital resources in many libraries.

### **Role of BIC**

E4libraries seeks to boost the profile of BIC as the ideal organisation to handle the issues of systems interoperability and the application and maintenance of standards in the library sector.

### **Project Scope**

The scope for e4libraries covers the whole supply chain from the provision of bibliographic resources right through, via EDI quote, order, order response, order fulfilment and invoice messages (full cycle EDI), to the eventual update of the invoice details to the local authority or university payments system. It also embraces the deployment of RFID and the associated requirements of standards and interoperability protocols between the Library Management System (LMS) and the RFID solution.

### **Progress made**

In 2013 the library sector is under even greater stress than when the e4libraries project was initiated in 2008. The major changes envisaged by the MLA who generously funded the e4libraries project at the start, did not in fact take place. Instead of a major top down restructure of the library supply chain involving centralised or regional bibliographic and stock supply, the market achieved much the same outcome by consolidation amongst library suppliers (the merger of Holts and Askews, Bertrams' purchase of Dawsons etc.) These library suppliers have also continued to develop their services to libraries and this has led to the fully integrated service offerings including bibliographic supply, supplier selection, RFID tagging, shelf-ready supply with all the necessary underlying electronic messaging components.

### **Threat of cuts**

The problem of funding cuts leading to library closures was foreseen in 2008 and e4libraries suggested and encouraged implementation of technology to enable libraries to offer improved services at lower cost. Now in 2013 the threat is even greater and for some libraries the technology invest to save option may still be open but many may now lack the necessary funds to invest in the technological developments suggested by the report (Full cycle EDI and RFID) but benefits could still be obtained by streamlining bibliographic processes or implementing supplier selection via supplier websites.

### **New technologies and other changes**

The new technologies which were only just on the horizon in 2008 such as e-readers, are now becoming mainstream and libraries are developing innovative solutions to enable them to supply eBooks and lend the necessary hardware. New LMS entrants have included Civica, with its authority level solution incorporating an LMS, and in the academic sector, Open Source has gained considerable traction. Some LMS suppliers have developed partnerships with RFID suppliers. SmartSM, LibScan and other services are now widely used.



### **Partnerships**

The e4libraries project was successful in encouraging libraries and their stock and systems suppliers to work together. Communication between these organisations has improved dramatically and this has enabled the fully integrated service offering from stock suppliers so that books arrive in libraries ready for the shelves, bibliographic data is ready on the library OPAC, RFID tags have been placed on the books and programmed to be recognised by the appropriate RFID solution in the library and the invoice is ready to pay. These partnerships have embraced the standards involved in Bib supply, EDI and RFID.

### **Interoperability**

The project researched some interoperability issues and discouraged the previously very prevalent expedient of using a bespoke text field to indicate a parameter which one system needed to communicate to another. Best practice was agreed and all sides of the supply chain took on board the importance of standards and interoperability between systems. It is not always easy but most organisations have demonstrated a commitment to the appropriate standards.

### **Promotional activity**

Following the initial research phase, the project moved into a promotional phase, involving visiting libraries, speaking at conferences and events and generally pushing best practice. The stock and system suppliers assisted in this either by offering roadshow speaking opportunities or implementing and often insisting on best practice in their relationship with their partners and library customers. The promotional phase involved case studies, a web site with downloadable guides and other resources, one-to-one coaching of decision makers and stake-holders to encourage them to implement EDI fully and obtain the benefits and also an accreditation scheme. The focus was on identifying and then encouraging best practice throughout the library supply chain. This involved bibliographic supply, EDI quotes and ordering, order fulfilment and invoice processing, improved tendering for LMS and RFID procurement and library stock supply.

### **Academic and Public Libraries**

The original project glanced at the academic sector but mostly focused on the public sector as the MLA was partly setting the agenda. Much of the innovation over the last five years has come from the academic sector. Here, it has been possible to integrate library RFID with university student entitlement services and several universities have developed solutions which were not anticipated in the 2008 report. Meanwhile public libraries have developed council services involving their RFID hardware so library patrons can for example pay their council tax at the library.

### **RFID standards**

E4libraries has been flexible as the needs of the library supply chain have changed. EDI has become widely used and commonplace whilst RFID has developed rapidly assisted by BIC's work in establishing a UK Data Model based on the ISO 28560/2 standard. The weak link between the LMS and RFID has also been addressed by BIC's continuing work on the Library Communication Framework (LCF) although this is new and still needs to be fully adopted by libraries.

### **UKSLC**

One additional area of work identified following the e4libraries research was the opportunity to take the established BIC subject codes used in the trade and on the Internet and provide a library friendly version. This work was undertaken 2009 to 2012 and the resulting subject classification scheme was initially called e4libraries subject headings. Some early adopters have also looked to display their library books using this scheme. The scheme has been through a thorough review process to obtain feedback from a panel of librarians and the result has now been published with a new name, UKSLC (UK Standard Library Codes)

### **e4libraries Accreditation**

To recognise the considerable achievements of libraries in implementing these solutions and in obtaining the benefits from their technologies, BIC developed an e4libraries accreditation scheme. This is still running and it is an opportunity for any library or organisation involved with libraries to demonstrate their credentials in this area and to receive this award. The scheme is free to all, it involves informing BIC of the organisation's activities in this area including technologies implemented and results obtained. The scheme is also confidential and if an organisation applies but is unsuccessful, BIC provides useful feedback on some key areas where more work could be done. BIC would urge all libraries to apply for this free accreditation scheme.



### **Conclusion**

The e4libraries project scoping report is still well worth reading to introduce the subject of library supply chain efficiency and identify the key areas which BIC recommends libraries should address. If you require any further input please contact BIC or [simon.edwards@dial.pipex.com](mailto:simon.edwards@dial.pipex.com).

As well as the e4libraries scoping report – which is available at: <http://www.bic.org.uk/e4librariesfiles/pdfs/e4libs-report-jan-08.pdf> – there are a number of other resources which may make useful background reading.

These are all available on the BIC/e4libraries website at [www.e4libraries.org](http://www.e4libraries.org). These reports include:

A technical framework for libraries:

<http://www.bic.org.uk/e4librariesfiles/pdfs/technical%20framework%20final%20080703.pdf>

A guide to RFID in libraries:

<http://www.bic.org.uk/e4librariesfiles/pdfs/081124%20library%20guide%20final%20rev.pdf>