# BIC Technology Excellence in Libraries Award (TEiLA)

A statement of the benefits of the BIC Technology Excellence in Libraries Award (TEiLA) Accreditation Scheme

## 1) Executive Summary

Both public and private sectors are very familiar with awards, charter-marks, ISO accreditations, Investors in People awards etc. The TEiLA (Technology Excellence in Libraries Award) is specific to libraries and to the deployment of beneficial technology and industry standards in the library supply chain. Libraries are often very reticent about their activities and achievements in the area of technology investment. Once a system or solution is implemented, not much is heard about it despite all the hard work that may have gone into it. Accreditation is one way to register this activity and bring it to the notice of stakeholders, customers/users/borrowers, management and politicians and by extending the accreditation requirements over time, the whole library community is encouraged to move forward.

The award is of benefit to libraries, stock suppliers, system vendors and service providers because holders of the award are demonstrating a commitment to industry standards and achievement in deploying the beneficial technologies identified by BIC as being of benefit to the library sector. These include:

- More accurate and up to date metadata, obtained more efficiently and at lower cost
- Quicker more efficient ordering via EDI and web services (including the use of quotes, supplier selection, patron driven acquisition etc.)
- Self-service technology (RFID) to enable speedier book issuing and returns via self-service and improved stock management, redeployment of staff into more creative and responsive customer facing roles and even an opportunity to refurbish the library as the old central counter can be replaced by self-service kiosks.
- Greater compliance with industry standards and processes leading to more widespread adoption of best practice and improvements in service at reduced cost.

In essence, BIC accreditation demonstrates that an organisation cares enough about the application of standards and the use of technology to submit its achievements for peer review.

## 2) Scheme Description

The accreditation scheme is completely free and applicants do not have to be members of BIC. It consists of an online form, hosted on a 3rd party platform, to be filled in by accreditation scheme applicants. The form asks a number of questions designed to ensure that the applicant is complying with BIC's programme of work in libraries.

This work centres on the implementation of beneficial technologies to improve library service and reduce costs. These technologies are implemented to industry standards developed or endorsed by BIC and the objective is to encourage libraries and their stock and systems suppliers to adopt best practice.

The information supplied on the form via the BIC website is output to BIC and analysed. A panel of industry experts who are familiar with library technologies and whose organisations have all

achieved accreditation themselves, meet to discuss each application assisted by the analysis provided by BIC. The Panel decides if the applicant has achieved a sufficient score to be accredited.

Feedback is given to all applicants. This shows how well the applicant is doing and any particular strengths and weaknesses. If the application has failed, then the feedback describes steps that the applicant could take to pass in future. Successful applicants are issued with a logo and certificate which can be displayed on marketing materials, websites, social media etc.

Accreditation lasts one year and must be renewed in future years. Note that the Technology Excellence in Libraries Award (TEiLA) supersedes the previous e4libraries award. The TEiLA scheme will launch on the 30th April 2018.

## 3) Technologies covered by the TEiLA accreditation scheme.

The scheme covers a number of areas where technology has been found to be beneficial to libraries.

### 3.1 Product Metadata – Bibliographic Data

BIC is committed to the efficient supply and use of up to date product metadata to assist in selection, collection management, quotation, ordering etc. e.g. via MARC records, Z39.50 etc.

The key areas are:

- How libraries obtain this information. This includes the sources of supply, the methods of obtaining this data and how efficiently this data can be ingested into library systems and databases.
- How libraries consume and display this data, e.g. for use by staff in acquisitions and collections management, for students at universities and for the general public and library visitors via online systems, OPAC etc.

### 3.2 EDI – Electronic Data Interchange (EDI)

EDI enables libraries and their stock suppliers to exchange electronically, business messages such as quotes, orders, order responses, order fulfilments and invoices. These have been shown to speed up communication between libraries and their stock suppliers and enable improved order turnaround, accuracy and automation. Each message adds value to the library supply workflow. BIC's recommendation is for libraries and their stock suppliers to implement 'full-cycle EDI' i.e. all the above EDI messages so that the whole ordering cycle from quotes to fulfilments and invoices is fully electronic. In the past, there has been a tendency for libraries to implement just orders or quotes and orders and then not to go any further. BIC is seeking to encourage libraries to implement full-cycle EDI to maximise the benefits of their investment in the technology. (Research done in 2007 by Havering Borough libraries into implementing full cycle EDI showed a reduced administration cost from over £5 per book ordered to less than £1 per book ordered). Additional case studies have been published by BIC and are on the BIC website at: http://www.bic.org.uk/e4libraries/12/CASE-STUDIES/

BIC has found that greater benefits derive from implementing the full cycle of EDI messages with all possible suppliers and at the highest possible volumes. It makes very little sense to implement EDI but then use other methods for a high proportion of orders or invoices.

### 3.3 RFID – Radio Frequency Identification

RFID involves placing an RFID tag on library books and enabling library patrons to self-issue these books at self-service kiosks. RFID can also be used to enable self-return and can set off a security alarm if a book is removed from the library without permission. RFID can radically improve libraries because, as the issue and return of library books is managed through RFID self-service by library patrons, libraries can be redesigned, removing the old issuing counters and providing a more attractive and inclusive space. Staff can be re-assigned to assist patrons instead of staffing issuing stations. RFID can also be used to manage library stock more effectively. Sortation systems in larger libraries can use RFID to sort stock into areas, departments or floors. Hand-held RFID readers can be used to search for missing or mis-shelved stock and they can speed up and enable more frequent stock-taking. BIC's recommendation is for libraries to receive 'shelf-ready stock'. This means that the book is received into the library fully catalogued and serviced with an RFID tag pre-installed, ready to be put straight onto the shelf in the library.

### 3.4 Systems Integration

BIC encourages libraries to integrate their systems as much as possible to reduce the errors which creep in when data is re-keyed from one system to another. So, an invoice should be received from a stock supplier electronically via EDI and should then be passed seamlessly to local authority or university financial systems without re-keying. Similarly, the Library Management System must be able to communicate effectively with the RFID Kiosk. This can be done in a basic way which enables a book to be issued, but by improving systems integration, the library can use additional features offered by the self-service Kiosk. This might include paying council tax or other services. To obtain the benefits of the library's investment in the technology, the systems must integrate efficiently. BIC has developed the LCF (Library Communication Framework) a framework to assist libraries and their systems vendors and RFID suppliers to develop communications more quickly and efficiently and to common standards.

### 3.5 Standards

Library technologies can be implemented in a haphazard way perhaps using proprietary formats, but this leads to extra costs over time as stock suppliers have to support multiple formats and systems suppliers have to develop these unique methods and this has to be paid for by libraries. It is far cheaper to implement exactly the same EDI message, Metadata format or RFID Protocol as every other library, as this implementation can then work with additional suppliers and additional libraries. Develop once and use many times is much more efficient than developing a unique method for each trading relationship. Unique solutions also often lead to systems lock-in where a single supplier has implemented a unique way of doing something and moving to another supplier would necessitate additional expensive development. The library is therefore locked in to that one supplier. This can occur with stock suppliers where non-standard EDI has been implemented and with library management systems suppliers where a non-standard implementation restricts the library's options in future. Libraries need to be aware of this issue and to insist on standard implementations.

Standards are difficult to enforce and some organisations may claim undeserved compliance to a particular standard. BIC's role is to resolve standards issues and provide much needed advice and guidance on any areas of concern or ambiguity. The accreditation scheme asks applicants to state which standards they comply with or support. These applications may alert BIC to these issues.

### 3.6 APIs/Web Services

BIC is about to start to develop a new suite of APIs/web services for libraries and these will be included in the accreditation scheme in future releases to reflect the work done by libraries and to encourage take up.

### 3.7 Additional technologies

In future years, additional areas may be added to the accreditation scheme. Some may be included initially just for information and to measure their development in libraries. An example of this is eBook lending. But, in future, these areas may be scored and may even become mandatory in order to achieve TEiLA accreditation. The accreditation scheme and scoring mechanism is flexible to accommodate new technologies and the on-going development of best practice in libraries. The Accreditation Panel can decide to include new areas and make other decisions on the running of the scheme with the approval of BIC Management. Note that the BIC Libraries Committee sets the scope of BIC's work in libraries and the accreditation scheme tests and encourages targeted areas of this work reporting to this committee. The Accreditation scheme's role is to discover what progress is being made in the library community to achieve BIC's objectives, to test compliance with these principles and then reward this compliance with accreditation.

## 4) Benefits of Accreditation

The accreditation scheme provides several benefits.

### 4.1 Library Patrons/customers/users/borrowers

It enables libraries to showcase their achievements in developing and implementing beneficial technologies to improve efficiency in the library and the service it offers to library patrons. The accreditation logo and certificate can be displayed and made the subject of promotional articles or publicity. The accreditation can be a headline statement under which the library can list its achievements, the technologies, their benefits, how the service has improved etc. Normally, it is difficult for a library to shout about their achievements in this area, but accreditation gives an ideal opportunity. The logo can be displayed on all library service publicity, printed and online. The certificate can be displayed prominently in the library, framed and mounted so that patrons and visitors can see how this library is investing in its service.

### 4.2 Stock Suppliers

The accreditation shows a library's stock suppliers what the library is capable of in systems terms. Stock suppliers view libraries with this award as easier (and possibly cheaper) to trade with. Suppliers want to supply libraries which use standards as this reduces their costs. The TEiLA accreditation says to stock suppliers that this library is technically capable, and that metadata can be received efficiently, orders placed efficiently, and stock accepted in a shelf-ready condition. Stock suppliers, themselves can achieve the accreditation and use it to promote their service to libraries e.g. being able to cater for all EDI requirements such as full-cycle EDI and being capable of supplying books as shelf-ready stock with standard RFID tags and servicing.

### 4.3 Politics

All libraries are funded in some way and they report to fund holders and administrative bodies. These authorities want to see that the library provides a good service at reasonable cost and by implementing BIC's programme of work across metadata, EDI, RFID and systems integration etc., many libraries both public and academic have derived significant benefits, cost reductions and

service improvements.

Public Libraries are part of local government and are constantly under threat of cuts. TEiLA may enable a library service to show that this is already an efficient library service, that technology has been implemented and that this has reduced costs. This may provide some protection against cuts as the library service budget may already have shown recent reductions due to payback from technology investment.

Senior Management and politicians also like to receive awards and a TEiLA accreditation may be useful to impress and demonstrate that the library service is efficient. Some politicians whose service has not been accredited may want to know why their library service has not yet achieved this award when others have. It has even been suggested that government should make achieving TEiLA accreditation mandatory for UK public libraries as part of establishing an improved future national library service.

### 4.4 Consultancy and Advice

Many libraries are currently below the standard for a TEiLA accreditation. They have some metadata, some EDI, but perhaps no RFID and poor systems integration. The aim is to encourage these libraries even in these difficult times, to identify best practice and to deploy standard solutions which deliver improved service at reduced cost. Libraries which apply for TEiLA but which fail are offered useful feedback and advice. Many libraries no longer have a systems librarian or similar role and they rely on their suppliers and others for help in this area. The right advice can help libraries move in the right direction so that for example when they next tender for a computer system, they ask the right questions and insist on a best practice, standards-based approach.

### 4.5 Systems Vendors and Service Providers

The accreditation scheme applies to systems vendors and service providers and is a way of enhancing their credibility with their customers. In effect, they are saying that they have invested in the necessary technology, industry standards and best practice and this in turn means more capable, open, less proprietary systems. Libraries should understand that this should make vendors easier to deal with.

### 4.6 Research

This is a benefit for BIC and for the future development of the accreditation scheme, rather than for libraries directly. Libraries filling in the accreditation form are informing BIC of progress made. This enables BIC to better understand library activity in this area and to be able to respond. For example, by including questions on the take up of digital products, services and hardware rental, BIC can monitor this in a detailed way and decide in future to include it in the accreditation requirements. This in turn keeps the accreditation scheme up to date and helps to bring organisations up to the same improved level over time.

### 4.7 Internal Research and Improved Understanding

Undertaking an analysis process which looks at standards and technology can be very useful for libraries, suppliers and systems vendors. More than one person or department may be needed to cover different sections of the scheme and analysing technical capabilities can help to inform and even surprise staff and management about their own organisation and its systems and

services. Achieving accreditation can also help management and staff to measure their achievements against their peers.

### 4.8 Demonstrating understanding of new RFID Privacy requirements and library compliance

BIC is currently working on a project to enable libraries to comply with upcoming EU privacy requirements. This involves systems analysis and library signage. BIC has developed a Code of Practice which spells out library and supplier responsibilities in this area and signing up to the code of practice has been added to the TEiLA accreditation scheme. It is hoped that this approach will enable libraries to discharge their responsibilities in this area without undergoing expensive privacy impact analysis as recommended by the EU.

## 5) Conclusion

The TEiLA accreditation scheme helps to promote, encourage and reward activity in the library supply chain. It is free, easy to apply for and open to all. Applicants who pass can display their certificate and logo wherever they wish, and applicants who fail, do so in complete confidence and can receive advice from BIC on how to improve.