DEPARTMENT OF ENVIRONMENT, LAND, WATER AND PLANNING

Victorian Public Libraries

SHARED SERVICES OPTIONS

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1. **INTRODUCTION**

1.1 **THIS REVIEW**

This review explores options that are available to increase collaboration through shared services in Victoria's public libraries. The aim of this is to improve service quality and service levels, deliver cost savings and increase efficiencies. It follows a number of reviews that were undertaken by the previous State Government into potential joint library initiatives. The review process was 'The Victorian Library' (for which a Business Case was prepared for in 2013).

This report examines a number of potential initiatives that the State Government may consider implementing and funding in relation to shared services in public libraries. The report is structured, firstly, by explaining each of three potential **project components**. The three components are also presented in various **combinations** that may be considered.

**PROJECT COMPONENTS:**

- **COMPONENT A:** Procure a Shared state-wide Library Management System (LMS) (Voluntary)
- **COMPONENT B:** Establish state-wide e-book/e-content collection
- **COMPONENT C:** Upgrade the system for state-wide sharing of physical resources (LibraryLink)

**OPTIONS/COMBINATIONS:**

- **COMBINATION 1:** (A) State-wide LMS + (B) Shared state-wide e-book collection + (C) Upgrade the system for state-wide sharing of physical resources
- **COMBINATION 2:** (B) Shared state-wide e-book collection + (C) Upgraded System for state-wide sharing of physical resources (LibraryLink)
- **COMBINATION 3:** (C) Upgrade the system for state-wide sharing of physical resources (LibraryLink)

The report explains and scopes each of these options. It then examines the costs and benefits of each option in detail.

1.2 **PUBLIC LIBRARY CONTEXT**

Public libraries in Victoria are local government owned and operated (excluding the State Library of Victoria). They are either operated directly by councils or operated through regional library corporations (RLCs) established under section 196 of the Local Government Act 1989. These entities (councils and RLCs) own and operate the library businesses, including the physical assets and collections/resources.

For a century, the role of public libraries has centred on education, knowledge, access to information and literacy improvement. In the past, their role has focused on the physical collections traditionally held by libraries. Library operations have been structured around the core activities of lending materials and providing advice to users. The information access/referral/resource lending function remains core to the role of libraries. However, in recent times, library service models have moved towards the conduct of activities and engagement-oriented community programs.

The role of the public library as an accepting and welcoming physical ‘place’ for people to go to remains fundamental.
2. COMPONENT A:
PROCURE A STATE-WIDE LMS TO BE SHARED BY PUBLIC LIBRARIES ON A VOLUNTARY BASIS

2.1 CONTEXT

The library management system (LMS) is effectively the 'engine room' of a public library IT system. It provides the core bibliographic database of the collection and the member database. The LMS provides the core functionality for the library to carry out its lending activities.

The LMS is also the foundation system upon which other enhanced functions and systems can be anchored (the discovery layer, reporting, collection management, content review applications, smart phone apps, etc.).

Currently, in Victoria, each library service is responsible for the procurement of its own LMS. Library services specify and tender for their LMS and individually contract with the preferred supplier. Libraries pay suppliers through a range of different supplier-defined pricing structures including up-front installation fees, annual software license fees, hosting and support fees etc.

Consequently, there are several diverse LMS's utilised by libraries across Victoria, each with different features, capability and characteristics. There are various contractual arrangements in place including software as a service (SAAS) and others, with libraries able to choose an arrangement that suits their own specific needs.

The quality of the search and discovery capabilities and features (that are part of the discovery layer) varies significantly from library to library. This partly reflects the preferences of each individual library but also the level of investment made by the library in purchasing quality, up to date search and discovery features.

In 2007, a number of library services (known as the SWIFT consortium) collaborated (with State Government assistance) to jointly procure a single shared LMS. Participation in SWIFT was/is voluntary and it currently includes 20 library services in Victoria. The system used by the SWIFT consortium provides one single shared catalogue, with membership databases held separately by individual library services. Under the current SWIFT arrangements, members must provide access to interlibrary loans within agreed SWIFT policy parameters (this is not proposed as a feature of this shared LMS proposal).

The SWIFT consortium is auspiced by the Municipal Association of Victoria (MAV) which contracts with the LMS vendor and on-charges fees to members.

Another recent example of a state-wide consortia approach to the procurement of a library management system was in South Australia. In that State, all libraries were included (compulsorily) in a universal state-wide LMS project. All public libraries in South Australia now share a single bibliographic database. They also use the same discovery layer which presents the local council/library logo as the predominant branding. The shared state-wide LMS was rolled out as part of the 'One Card' project. Library users were all offered a new standardised library card that offered membership benefit portability and the opportunity to 'borrow anywhere, return anywhere'.

2.2 COMPONENT DESCRIPTION

This component would involve the State Government procuring a state-wide library management system (LMS) to be made available for all libraries to use (on a voluntary basis). This component includes the core LMS, a high quality discovery layer, plus a choice of other third party add-ons and products (such as management reporting, content review and collection management modules). This component does not include a shared state-wide e-resource collection.
Participation in the state-wide LMS procurement and implementation would be entirely voluntary. Libraries may choose to continue to use their own LMS of choice (at their own cost). Also, the choice by a library to participate in the shared state-wide LMS would involve no policy presumptions or requirements in relation to sharing their existing collection resources with other library users (i.e.; as is the case with SWIFT). Nor would this activity have any requirements in relation to collection management /access /lending policy matters or the charging of fees and fines. These policy matters would remain totally at the discretion of the individual library service. The shared LMS procured would be scoped and specified to ensure that these individual library policy variables remain optional choices for each individual participating library.

However, participating libraries could elect to share their collection resources (within broad parameters that they select), and this choice would be available through the shared state-wide LMS. The logistics of handling, transport and delivery of physical materials (inter-library loans) would be the responsibility of individual libraries.

This component offers a 'state-of-the-art' LMS with features and functionality at least equal to, or better than, the systems currently in place at library services across the State. In other words, the system would be scoped and specified to the highest common denominator in terms of service level to staff and customers and functionality.

The common state-wide LMS would include a quality core system capability specified to meet all the functional needs of a public library. In addition, it would include a range of add-on services and features provided by the vendor (and third party vendors).

A centrally procured shared state-wide LMS would include:

- an option for a shared or totally separate bibliographic catalogue;
- membership database to be held separately by each library (with the option for sharing at their discretion);
- a lending system;
- RFID (Radio Frequency Identification Device) interface capability (but not the RFID hardware or SIP licences etc.);
- integrated SMS (short message service) functionality;
- smart-phone and tablet apps/capability;
- high quality discovery layer with best-available, multi-source, multi-format and multilingual federated search capability. (This would include search/discovery capability by the core LMS vendor and/or a chosen third-party search engine provider);
- choice of third-party products/add-ons - the LMS will support add-on features such as integrated and flexible management reporting, content reviewing, collection management, platform for access to e-resources, genealogy, local history and reporting;
- managed services/hosting with multi-level support, secure back-up protocols and services; and,
- state-wide data capture, reporting and digital archive.

In a shared LMS environment, there would be a need to set up a policy governance structure to oversee and manage the process from a procurement, probity and project management perspective. However, as this proposal does not involve any prerequisites regarding the standardisation of policy, there is no need for state-wide policy oversight to deal with collection management and lending policy matters. Under this LMS shared services proposal, all individual library lending, collection
management and fees/fines policy autonomy would be wholly retained by the individual library services.

The establishment of a state-wide LMS has significant change management and transitional issues. This would especially apply to libraries that are required to change their LMS system/vendor. It is proposed that all transitional elements be addressed and included as part of the LMS specification. This includes data migration, transition management and comprehensive system training for library staff. These would be activities that libraries would undertake periodically when their contract for their LMS expire and they are required to retender.

Given the scale of this change for libraries and its long-term operational impacts on library services, the contract term for a new shared state-wide LMS needs to be a reasonably long period. For the purposes of this report, an LMS contract term of seven years is assumed with a state-wide roll-out over the first three years.

As stated, it is proposed that each participating library would retain their own separate catalogue and members’ data base, allowing the process of transitioning to the new shared LMS to be much easier. For example, there would be no need to undertake catalogue de-duplication, verification etc. as would be required in a shared catalogue environment (ie; South Australia example and SWIFT).

System training would be included as part of the LMS specification and provided to staff in library services as part of implementation.

2.3 RATIONALE AND BENEFITS

The core rationale for a shared state-wide LMS is the cost savings that can be achieved through a larger consortia-based procurement. Negotiating a single state-wide contract is expected to yield significant savings for libraries. These savings could then be used to reinvest in improved services elsewhere within the library sector and to purchase additional resources (ie; shared e-content etc.).

A shared state-wide LMS will also enable the sharing and tracking of collection resources between users and libraries across the State (for those libraries that choose to share their collections and membership databases). As noted above however, this option does not include the physical transport of materials between libraries- this will be up to individual libraries to arrange and fund (although the shared state-wide LMS will help facilitate this).

This component provides a system foundation for a range of other service improvements. These include a universal state-wide technological platform to enable improved library access to, and delivery of, e-content (see component B).

A shared state-wide LMS would offer the following benefits:

- enable a single database for all resources held in all Victorian libraries (for those libraries choosing to be part of a shared catalogue). For libraries wanting to maintain a separate library catalogue, they would retain this option;
- enable seamless/streamlined search and discovery of resources within the shared catalogue and (to the extent allowed by the options elected by each participating library) also within the discrete catalogues. The collections of all participating services could be easily searched by the public using a single discovery layer or smart phone app;
- enable sharing of resources among libraries (within their own individual collection access and management policies);
state-wide LMS procurement would achieve economies of scale and savings for participating councils/RLCs. (License fees for the core LMS plus a choice of quality third party products/add-ons would be paid directly by the State under this option, thereby delivering a saving for these costs for councils and RLCs. Implementation, training and data transition costs would all be included as part of the contract);

for many library services (especially smaller rural and regional libraries), a shared state-wide LMS would result in a much higher service level and system capability for the community and staff than what exists at present. It would bring all Victorian library services up to a new and uniformly higher minimum level of service (in terms of discovery layer/experience and LMS functionality, apps etc.)

provide a foundation for other potential future service improvements/ shared services initiatives by libraries;

create a state-wide digital library archive for libraries;

improve the functionality and presentation of public libraries (through more standardised discovery layer), while enabling the retention of distinctive local branding integrated with local service and program-specific information;

increase data capture, statistical and performance reporting capability for public libraries across the State. This would better inform decision-making and policy development at both the State and local government levels;

a single LMS would more easily facilitate inter-library loans (for participating services);

individual libraries would no longer need to provide their own hosting, server and technical support, or to pay third parties to provide this hosting and these servers; and,

retain total choice/discretion for individual libraries in terms of collection management/ access policy, fees/fines and inter-library lending.

2.4 DISADVANTAGES/LIMITATIONS
The disadvantages/limitations of this option are:

there would be a one-off transition cost for libraries, particularly in human resources, in moving from their current LMS to the one procured state-wide (this is despite the fact that implementation, transition and staff training would be included in the LMS specification);

this option necessarily involves library services giving up some of their direct control and autonomy over their LMS and direct control over the support for that LMS with the vendor; and,

the benefit that would flow to larger, better resourced library services (which may currently run a ‘top-of-the-line’ LMS, discovery and other add-ons) is more marginal than the level of benefit that would flow to smaller, poorer resourced libraries operating older systems. However, the benefits of all libraries having wider access to state-wide discovery process etc. still apply to all libraries.

2.5 ESTIMATED COSTS
The estimated cost of procuring and implementing of shared state-wide LMS for all libraries in Victoria is based on the following assumptions:
- seven year contract term;
- inclusion of implementation, transition, staff training, data migration costs (staff time/salaries whilst participating in training are not included);
- inclusion of all installation/license/hosting fees for the core LMS and quality range of third party products; and,
- inclusion of post-contract review and re-specification/re-tender costs.

It is estimated that this component will cost in the range of $18.29 million to $22.36 million over a seven year contract period ($2.61 million to $3.19 million average per annum). This option will deliver significant annual savings for libraries.

2.6 SUMMARY

As demonstrated through the experience of the SWIFT consortium in Victoria and with the implementation of a state-wide LMS in South Australia, there are few significant technical barriers to this option and none that can’t be overcome though collaborative procurement.

It is noted that a shared state-wide LMS alone does not include the logistics of transport and delivery of shared physical resources between libraries (i.e; that is, transport requirements above the current courier daily ‘satchel’ service that is presently in place which is proposed to continue at the same level).

A shared LMS would require participating libraries to agree on broad system specifications/features as part of the procurement process. This necessarily involves some loss of choice and may involve some departure from the ‘ideal’ system features and functionality, as viewed by individual libraries.

Achieving a single, shared state-wide LMS is a relatively straight forward procurement project. It does not involve the development of tailored software with all the risks that implies.

It is evident (from the SWIFT and South Australian experiences cited above) that a consortium approach to LMS procurement will lead to significant savings. The scale of such savings is dependent on the scope and structure of the specification and market conditions of the day.

The savings will be realised as the overall cost of the state-wide procurement will be significantly less that the total of all existing individual council/library LMS costs.

A shared LMS will also lift all library services up to a new and uniformly higher service level with quality search and discovery for users (rural, regional and metropolitan), smart phone app plus other features.
3. **COMPONENT B: PROCURE A SHARED STATE-WIDE E-BOOK/E-CONTENT COLLECTION**

### 3.1 CONTEXT

With the emergence of the internet and digital age, the way people access information, their reading patterns and preferences have changed over recent years. This has vastly increased the need for libraries to be technologically up-to-date.

Increased uptake of internet resources and the proliferation of personal computers, tablets, e-readers and e-content has led to a shift away from the traditional library focus on printed materials. The long-term term impact on libraries of vastly increased content portability (digital formats), new and emerging technologies and commercial pressures facing publishers world-wide is still unfolding.

Libraries are experiencing rapid change and new challenges in the role they play in their communities. With increased access to new technology, people are still using libraries but in different ways. Libraries are playing less of their traditional roles with more focus on programs, engagement and helping their community access the digital world effectively.

The biggest challenge facing libraries world-wide is enabling seamless, easy access for their patrons to a quality range of e-content and e-books.

Research shows that world-wide, e-book sales and use has grown enormously over the past five years. That growth is still continuing, though at a significantly slower pace than it was a few years ago. People still buy and read print books but the print market share (compared to e-books) has declined in relative terms. It has become evident that the total size of the potential market for 'content consumption' (in all formats) by the community cannot be defined by the limitations of the traditional physical formats.

Research shows that people who read in both the digital and physical formats are accessing much more content (across both formats) than they have in the past (in only the physical format).

The ability of public libraries to respond effectively to these changed user needs has been constrained by the commercial concerns of the major international publishers. Whilst attitudes and responses vary, e-books and the vastly increased portability of digital content is widely perceived by publishers to pose a threat to their business model.

Some publishers have, over recent years, sought to protect their own commercial interests by applying restrictive access/license terms to libraries for access to e-content. This has made it hard for libraries to get easily (and timely) access to quality titles in e-formats at reasonable prices. Licensing terms offered to libraries for e-books vary from publisher to publisher and restrictions exist in a range of pricing and non-pricing ways. Further, libraries in recent years have expressed concern that they are being offered 'access' and 'use rights' for e-books (to limited resources only and on terms dictated by publishers) under licenses rather than outright ownership which they traditionally have had in the past. Restrictions include measures such as 'windowing' (delayed release of e-format), limiting the number of checkouts per title, fixed license periods, limited catalogue access for libraries and inflated prices.

In addition to publishers, the library sector is serviced by various content 'aggregators'. These aggregators source (from various publishers), aggregate, process, on-sell and deliver content tailored to library needs. They also offer libraries contracted access to their own proprietary delivery platforms for the delivery of e-books/e-content to library users.

The quality of e-book access and discovery today varies greatly from library to library. This substantially reflects the underlying structural issues (identified above) as well as
the level of investment by libraries into e-content acquisition and discovery mechanisms.

A key concern among libraries is the lack of integrated search and discovery processes that keep the borrowing transaction (or at least appear to keep it through the eyes of the user) wholly within the library branding and 'ecosystem'. This is a critical issue from a library branding, goodwill and marketing perspective.

At present, search and discovery for e-content, whilst originating in the library discovery layer, overtly moves to a different (usually aggregator-owned) platform where an e-book/e-resource option is then chosen by the user. In some cases, discovery of e-books is also done through the aggregator’s platform. Lack of search/discovery integration with the main library catalogue search/discovery is an inconvenience to users. Importantly, this does not promote the idea of the public library being the repository and access point for all forms of content. Indeed, consumer research, in some libraries, now shows that users who do access e-content through a library may credit that access (at least in part) to the platform owner (the contracted aggregator) rather than the library itself which has purchased the access rights for them. This may be damaging to the public library 'brand'.

Public libraries need to remain a relevant medium for accessing content (in both digital and physical formats) in the digital age. To do this, it is critical that they can offer a good range of quality digital content and resources seamlessly and easily to users. It is also clear that any e-content solution proposed for libraries needs to respond within the context of the market realities and limitations as they currently exist. (Seeking to change the world-wide publishing sector pressures on library access to e-books through a Victorian State-level initiative is unrealistic).

The key challenges for the library sector with e-content, therefore, are access and terms, as well as the content discovery and delivery processes. Moving into the future libraries need to be able to:

1. **access** a quality range of e-content through the market on reasonable terms;
2. offer their patrons the tools and mechanisms required to **search** the e-content they have acquired and to easily **discover** what they want in a convenient, seamless way. This needs to be integrated within the main library discovery layer/process so that the transaction is, as far as possible, seen by the library user to be occurring within the library 'ecosystem' rather than on an external (aggregator) platform; and,
3. facilitate **delivery** of borrowed content in formats that are readily able to be used by users on their choice of device.

There are a range of other issues relating to access to e-books that continue to present a significant challenges for libraries. In particular, the access by library users to sufficient bandwidth to facilitate easy and quick content search, discovery and delivery is acknowledged as still being a challenge for many libraries (mainly rural/regional). However, developing strategies to address bandwidth issues is beyond the scope of this review.

### 3.2 COMPONENT DESCRIPTION

This component involves the establishment, through a procurement process, of a shared state-wide e-book/e-resource collection.

There is no shared state-wide LMS under this component. The shared state-wide e-content collection would be made available through a single portal (state-of-the-art discovery layer) to offer access to the shared state-wide collection for all Victorians.
It is proposed that a specification would be prepared and a tender process conducted to procure the e-book/e-content for the collection. A separate and parallel contract and procurement process would be undertaken to establish the necessary delivery platform/discovery mechanisms to enable searching and delivery of the shared state-wide resources by and to library users.

Contracts would be entered into with a panel of one or more providers/aggregators of digital content. This content would then be made seamlessly accessible to/discoverable by library users across Victoria through either:

- their local library discovery layer; or,
- the state-wide portal (ie; the discovery layer procured to facilitate access to the shared collection).

A panel of content providers is proposed as it is unlikely that any single provider/aggregator will be able to offer access to a sufficient range of quality resources on acceptable terms. The size and diversity of the panel, as well as the structure of the supply specification, would need to be carefully defined (with library sector input) to ensure that a balanced e-content offering and coverage is achieved. This is proposed to be achieved through existing stakeholders and an e-content working group to be established for that purpose.

Subject to the detailed input of this working group, it is envisaged that there will be three key parts to the e-content specification:

- **Access to Content:**
  The proposed contract would include a wide range of e-resources including e-books, audio-visual, music, databases and journals. It is also proposed to address library needs in relation to digitized local content.

- **Search and discovery:**
  Providers will be required to make content seamlessly available for search and discovery by library users through the state-wide discovery layer.

- **Delivery process:**
  Providers will be required to make the purchased content available to library users to access in a manner whereby the entire borrowing transaction appears (through the eyes of the user) remains substantively within the state-wide discovery and lending 'eco-system' (rather than overtly move to the service provider's platform).
This option is illustrated conceptually below:

![Diagram]

It is envisaged that a best-of-class discovery layer—the single portal—would be procured, to facilitate user access, searching and content delivery. As each member’s home service would be known, it is proposed that the single access portal would be locally 'branded' based on the home service, using appropriate logos, selected colours and displaying the local service's loan terms and conditions.

This option requires the establishment of the necessary APIs by vendors (the vast majority of which already exist) to facilitate communication between the state-wide portal and aggregators and individual libraries.

Library services could also feed details of catalogue items in their locally owned e-book collection that they would like to make available to their members through the state-wide e-book discovery platform.

The single portal will include a seamless delivery mechanism (this avoids the current clunky re-direction of users to the aggregator’s website for content download). The arrangements set up for facilitating access to other forms of e-content (ie; subscription databases, journals and audio-visual resources etc.) will need to be separately considered to those established for enabling access to e-books. This is due to the fundamental differences between e-books and other web/database resources. For example, the nature of a library-subscribed database is that access is gained by log-in to a specific website, rather than by downloading a file/resource to a device.

It is proposed under this option that the e-content provider panel would be established based on a guaranteed annual e-content 'spend' (to be defined). Through the panel, an annual e-resource procurement program would be undertaken (within the defined State e-resource budget). These resources would be made discoverable through the virtual library and portal established for this purpose.

In addition, individual councils/RLCs would be able to supplement the core level of e-resources procured and directly procure (and self-fund) additional e-resources through the panel (ie; over and above those made available through the state-wide initiative). Individually procured e-content items purchased would only be discoverable for users of the owner library.

Under this option, libraries would need to arrange with their discovery layer vendor to facilitate access to the shared state-wide e-content collection through the portal and virtual library.
It is also proposed, under this option, to structure and execute the state-wide procurement e-content process in a way that recognises the realities of the publishing and e-content market as it applies in Australia today. In particular, it is expected that there may be a level of resistance by publishers to establishing a large state-wide shared e-book collection as proposed under this option. This concern is especially the case with e-books where the potential for piracy exists and this is perceived to be exacerbated by the extensive patron reach enjoyed by public libraries.

Investigation also suggests that councils/RLCs directly consulting with publishers, as part of the specification process for the procurement, in addition to e-content aggregators, may lead to better outcomes in terms of collection diversity, availability and price, while also addressing the concerns publishers have with regard to e-books and libraries.

3.3 RATIONALE AND BENEFITS

The challenges facing libraries with getting access to quality e-content are a worldwide issue: they are not confined to libraries in Victoria or Australia. Hence, this component recognises and seeks to work within the realities of the publishing market place as it exists today.

The core rationale for this component is that it positions libraries strategically to remain relevant in the future digital content era. Further, it offers value for money: by undertaking a significant state-wide spend, libraries will be able to get the best value in today's volatile e-content market.

Further, this component does not hinder any future actions or initiatives that may be undertake either individually by libraries or at a state-wide level in relation to e-resources.

This project component would deliver the following benefits:

- improves the position of public libraries strategically to remain relevant into the digital content era in the future;
- addresses key library issues and concerns in relation to other e-content (such as databases etc.) as well as e-books;
- significantly enhances the size and diversity of the e-book collection available for all library members throughout the State;
- significantly improves and makes more seamless user discovery of state-wide e-book collection resources;
- requires providers to facilitate user access to content through seamless search and discovery through a single access portal/discovery layer, as well as enabling access through individual library discovery layers;
- continued access to locally acquired e-books (quarantined for local users), in addition to the state-wide acquisition (made available to all library users state-wide).
- aggregates library e-content purchasing power with these aggregation benefits especially focused on the smaller/lower population/lower budget libraries;
- establishes panel of e-content providers to ensure maximum resource scope, provider choice, range and quality;
- applies a centrally driven, shared services approach to what is a significant strategic challenge for public libraries;
- enables continued development of, and investment in, existing larger library e-book collections (ie; over and above the shared state-wide collection that would only be available to that library's users); and,
- provides a sector-level response to the current e-book access challenges while recognising the underlying commercial and licensing-related access barriers that exist.

3.4 DISADVANTAGES/LIMITATIONS

There are no disadvantages of this component but there are some implementation challenges. There are two main implementation challenges with this component:

- it relies on being able to effectively harness, through the state-wide procurement process, a significant level of competition in the market for the provision of e-content. Recent history indicates that there is likely to be a level of publisher resistance to a consortia procurement of e-content; and
- it improves but does not resolve one of the key challenges currently faced by libraries in relation to e-content - that is, enabling seamless search and discovery. In this respect, it is possible (depending on the degree to which individual library services participate in the state-wide e-content collection and choose to share their resources) that some users could still be presented with three discrete web sites in searching for e-content - the library service’s own discovery layer, the state-wide e-content discovery layer and finally the aggregator’s delivery site.

3.5 ESTIMATED COSTS

The estimated cost of undertaking a state-wide e-content procurement is flexible and scalable - for this analysis, it is expressed as an annual e-content budget of $0.5 million for content acquisition plus additional access, discovery layer and other costs. The total cost over a seven year period is estimated to be in the range of $8.09 million to $9.89 million (or from $1.16 million to $1.41 million on average annually).

This option is an investment in a significantly increased service level for library users. It does not deliver any savings.

3.6 SUMMARY

This project component represents the best possible e-content initiative that could be implemented in today’s market context. Whilst not fully addressing all concerns, it substantially addresses the most significant challenge currently facing public libraries: that is, getting access to a quality range of e-books on reasonable terms and being able to deliver them seamlessly to users.

It offers the benefits of a establishing a state-wide e-book/e-content resource to be shared by libraries across Victoria combined with seamless discovery and access for users through a single portal. At the same time, it allows libraries to continue to ‘top-up’ the state-wide resource with their own locally available e-content resources, resulting in an even higher service level for users.

The most significant challenge is the satisfactory negotiation with the e-book aggregators/content supplies. This relates to both content range, terms of access (which are a factor of the market and the procurement process itself) and the technical issues relating to accessing it through the establishment of a single access portal.

The publishing world and matters relating to e-content access by libraries remain in a state of continual flux. These are matters that are well beyond the control of libraries. This is particularly the case in Australia, where not all e-content is made available through aggregators, and not in all formats. Kindle (Amazon's proprietary device), for
example, is the most popular e-reader world-wide, but content in the Kindle format is not offered by aggregators to Australians (as it is to US citizens).

Historically, publishers and aggregators have expressed reluctance to engage with large consortia procurement of content generally and this will also apply to e-content. Similarly, aggregators prefer clients to use of their own proprietary delivery platforms/mechanisms, to those developed by others, as is proposed under this component.

Another significant issue is the integration of the state-wide discovery platform (acquired under this option to allow discovery and delivery of the shared e-content collection) with each service’s existing LMS. Regular uploads of library service catalogue to the shared collection, or updates to previous uploads will be required. Also, ideally each of the vendors of the existing LMSs would need to enhance their product (in some cases older or discontinued versions) to interface with the state-wide e-content discovery platform. The vendors would be likely to charge fees to libraries for this service. Where this is not possible, or may take a while to implement, screen capture could be used to achieve similar outcomes in the interim.

To ensure integrated searching of local and state-wide collections, library services would need to make their catalogue available to the state-wide discovery layer, and supply regular updates (additions, deletions, etc).

Aggregator responses to this approach can only be tested through a competitive, carefully-specified, State-led foray into the e-content market backed by a significant pooled budget.
4. COMPONENT C: UPGRADE THE SYSTEM FOR STATE-WIDE SHARING OF PHYSICAL RESOURCES (LIBRARYLINK)

4.1 CONTEXT

Inter-library loans (ILLs) are a core part of public library culture world-wide. To differing degrees, libraries have shared their collection resources across the State (and interstate) for many years. ALIA (Australian Library and Information Association) which is the peak body for public libraries in Australia, has an Inter-Library Resource Sharing (ILRS) Code that sets out standards, service levels and protocols. The Code, which allows for the charging of a fee for inter-library loans to cover costs, aims to facilitate resource sharing between libraries based on reciprocity, fairness and cooperation.

ILLs in past years have been for physical resources which require transport. These include all forms of physical library resources such as print books, magazines, CDs, DVDs etc. Individual libraries can control the level of inter-library loans they are prepared to allow through a range of access policy measures. For example, experience shows that inter-library loans can account for 5-8% of total circulation if unrestricted. However, where an ILL fee is charged, the take-up reduces sharply. The extent to which ILLs are allowed varies from library to library.

Whilst digital content is increasing in use relative to physical resources, it is assumed, for the purposes of this report, that there will continue to be a need in future to facilitate state-wide inter-library loans for physical items. There are two main systems currently in place for ILLs - LibraryLink and SWIFT.

LibraryLink is an integrated search function and website that is funded by the Victorian Government. It allows users to search the catalogues of all library services in Victoria and place a request for an ILL. While some features are automated, both the requesting and lending library need to agree to the request. LibraryLink is not embedded within the LMS of any library services and therefore it is not user-friendly or seamless. As a result, (together with the fact that some libraries charges fees for ILLs), the number of inter-library loans actioned via LibraryLink is low.

Inter-library loans are much higher for libraries that are part of the SWIFT consortium (as explained earlier) where they account for about 5% of total circulation. SWIFT consortium libraries have a shared catalogue database and users can readily see and search the collections of all the libraries (ie; not just their local library catalogue). If a user finds an item at another SWIFT library, an ILL transaction is simple - the user can simply order it on the system for delivery to their local library.

From the user perspective, the borrowing transaction is much the same for an inter-library loan as for a local user loan and there are limited barriers in place. Due to the simplicity of the system, substantially more inter-library loans are handled through the SWIFT consortium than through LibraryLink.

Inter-library loans are moved via the existing state-wide Toll (DX) contract managed by the State Government. Local intra-service branch-to-branch deliveries are the responsibility of each library service.

Under the State contract, each library service has a single DX delivery point, with provision for one bag of mail, up to 15kg, to be picked up each day. Material borrowed from a library service must also be returned to the same library service by the borrower.

LibraryLink is cumbersome with a two-stage request and verification system. It is now ageing and due for upgrade/replacement. Whatever happens with the other components addressed in this report (e-books, single LMS etc.), it is assumed that libraries throughout the State will still need a system to communicate with each other.
and to facilitate inter-library lending of physical collection resources (for those libraries that wish to).

However, this is a broad ‘systemic’ assumption rather than an individual library access policy assumption. It is assumed that within any future system to facilitate ILLS (ie; to replace LibraryLink), individual libraries will still need the ability, within that system, to apply access policy conditions and limitation on ILLs, as they see fit, as they do now.

4.2 COMPONENT DESCRIPTION

This project component involves the purchase of a new state-wide system/discovery layer (to replace LibraryLink) to facilitate ILLs and the exchange of physical library resources throughout the State.

This new state-wide discovery layer would be a ‘best-in-class’ product that would include full federated search/discovery functionality. It would allow for the discovery of items in any library service’s collection, and a facility for members to request/action the inter-library loan of this item. As stated, this component only provides the ‘enabling system’ for ILLS - it does not presume any policy choices by individual libraries as to whether and to what extent they allow ILLs through the system. Those decisions would remain exclusively the policy domain of each library.

The proposed discovery layer will:
- allow an federated search of content at all library services;
- provide access to each service’s catalogue through regular upload and change reporting;
- offer access to live content availability through APIs made accessible by service’s LMS, or through screen capture, if necessary;
- allow users to request a loan from a service of which they are not a member, subject to agreed terms, conditions and fees;
- requests for inter-library loans will be electronically passed on to library services, as per current procedures, for the services to arrange delivery as appropriate; and,
- replace the existing LibraryLink software.

4.3 RATIONALE AND BENEFITS

The rationale for this project component reflects the fact that whatever happens (or doesn’t happen) with a share state-wide e-book collection and/or a shared state-wide LMS, there will still be a need for libraries to technologically communicate with each other and to facilitate inter-library loans of physical collection resources (which occurs currently through LibraryLink).

This component is therefore to replace/upgrade the LibraryLink service. It would provide an improved/updated system for the current services offered to libraries through LibraryLink.

This option would deliver the following benefits:
- improves/upgrades the current platform/mechanism for inter-library exchange of physical collection resources through LibraryLink;
- cost effective/low cost component; and,
• various easy/‘off-the-shelf’ options are available to implement this.

4.3 DISADVANTAGES/LIMITATIONS
The disadvantages/limitations of this component are:

• to ensure integrated searching of local and state-wide collections, library services would need to make their catalogue available to the state-wide discovery layer, and supply regular updates (additions, deletions, etc);
• does not improve the level/quality/integration of resource search and discovery of resources generally (physical and e-content) that is available to library users state-wide;
• does not address the highest public library need/challenge of enabling seamless library user access to quality choice of e-content; and,
• replacement of the ageing LibraryLink with a contemporary fully-featured system which is easier to use may lead to increased demand for inter-library loans (depending policies applied).

4.4 ESTIMATED COSTS
It is estimated that this component will cost between $5.12 million and $6.26 million over a seven year contract term (or between $0.73 million and $0.89 million on average annually).

4.5 SUMMARY
This component essentially offers a minimum intervention level. It addresses the need to upgrade the existing LibraryLink system. It would provide an up-to-date system that enables the exchange of physical resources between libraries, whilst preserving the policy autonomy of individual libraries using that system.

But this component does not deliver any quantum service level improvements in relation to digital resource/e-content access for library users which is widely agreed to be the highest and most critical public library priority today.
5. COMBINATION 1:
A: STATE-WIDE LMS + B: SHARED STATE-WIDE E-CONTENT COLLECTION + C: UPGRADED SYSTEM FOR SHARING OF PHYSICAL RESOURCES (LIBRARYLINK)

5.1 DESCRIPTION
This option combines the procurement of a state-wide LMS with a shared state-wide e-book/e-content collection and an upgrade to the system for sharing physical resources between libraries (LibraryLink).

The shared state-wide LMS would include a quality core system capability specified to meet all the functional needs of a public library. In addition, it would include a range of add-on services and features provided by the vendor (and third party vendors) as described in section 2.2 (Component A). This includes SMS functionality, smart phone app, enhanced discovery, RFID interface capability, collection management, content review, management reporting etc.

Under this combination, the discovery layer procured as part of the state-wide LMS would be specified to enable it to operate seamlessly with the shared state-wide e-content collection.

An e-content discovery layer (accessible to all library users state-wide), separate to individual library services’ discovery layer would still need to be sourced under this option to enable access to the shared state-wide e-content collection for users of those libraries that choose not to take up the option of the shared LMS.

5.2 RATIONALE AND BENEFITS
This option combines the procurement of a state-wide LMS (and the likely savings that would flow therefrom) with the significant service level improvement of a shared state-wide e-book/e-content collection. It also upgrades the system for sharing of physical collection resources between libraries (to replace the dated LibraryLink) whilst preserving individual library ILL policy autonomy.

Overall, this option offers the best possible combination of library benefit, user benefit/service improvement, individual library choice/flexibility and savings. It would bring all Victorian library services up to a new and uniformly higher minimum level of service (in terms of discovery layer/experience and LMS functionality, apps etc.).

This option also retains total decision choice and flexibility for individual libraries. Under this option, all libraries retain the ability to elect not to participate in the shared state-wide LMS and retain (at their own cost) their existing LMS. They may also choose to not offer their users access to the state-wide e-content collection and apply their own ILL (physical resources) access policies.

This option also lays the foundation for the future implementation of other features included in The Victorian Library proposal, such as installing RFID in the state-wide collection to facilitate easier movement of physical resources, universal access to libraries through a single card, and so on.
Libraries may continue to procure e-content (and physical resources) for the exclusive use of their own library patrons if they so choose and the system will be able to quarantine locally-owned from state-wide collection access.

5.3 DISADVANTAGES/LIMITATIONS

There are no disadvantages with this combination. However, being a shared service project, it inevitably involves a degree of compromise by individual libraries on choice (in terms of specific system scope and specification). However, this is offset by the ability of libraries to elect not to participate in project components anyway.

5.4 ESTIMATED COSTS

It is estimated that this combination will cost between $21.91 million and $26.77 million over a seven year contract term (or between $3.13 million and $3.82 million on average annually).
6. **COMBINATION 2:**

B: SHARED STATE-WIDE E-CONTENT COLLECTION + C: UPGRADED SYSTEM FOR SHARING OF PHYSICAL RESOURCES (*LibraryLink*)

**COMPONENT B:** Establish state-wide e-book/e-content Collection

**COMPONENT C:** Upgrade the system for state-wide sharing of physical resources (*LibraryLink*)

### 6.1 DESCRIPTION

This option combines the establishment of a shared state-wide e-book/e-content collection with an upgrade to the system for sharing physical resources between libraries (*LibraryLink*). There is no shared state-wide LMS procured under this option.

A separate e-content discovery layer (accessible to all library users state-wide) would be procured under this option to enable access to the shared state-wide e-content collection. This discovery layer would be specified to enable it to interact as seamlessly as possible with the various individual LMSs (of various ages, versions and levels of technical capability/sophistication) via a combination of periodic catalogue uploads, APIs established for that purpose and, where necessary, screen capture.

### 6.2 RATIONALE AND BENEFITS

This option combines the significant service level improvement of a shared state-wide e-book/e-content collection with an upgrade to the existing system for sharing of physical collection resources. This option also retains decision choice and flexibility for individual libraries. Under this option, all libraries retain the ability to elect not to participate in the shared state-wide e-book/e-content collection if they so choose.

This option offers a strong combination of library benefit, community benefit/service improvement and individual library choice/flexibility but without the savings that would be achieved from a shared LMS procurement.

### 6.3 DISADVANTAGES/LIMITATIONS

The disadvantages/limitations of this option are firstly that there are no potential savings that can be achieved (through the procurement of a shared state-wide LMS). Further, because there is no shared state-wide LMS under this combination, the search and discovery process for e-content (with multiple LMSs continuing to be used by libraries) will remain a two-step process for users (and not quite as streamlined as it would be under combination 1 above).

Despite these limitations, this remains an excellent combination of shared services initiatives that would deliver substantial benefit.

### 6.4 ESTIMATED COSTS

It is estimated that this combination will cost between $8.27 million and $10.11 million over a seven year contract term (or between $1.18 million and $1.44 million on average annually).
7. **COMBINATION 3:**
A: STATE-WIDE LMS + C: UPGRADED SYSTEM FOR SHARING OF PHYSICAL RESOURCES
(*LibraryLink*)

**COMPONENT A:**
Procure a shared state-wide LMS (Voluntary)

**COMPONENT C:**
Upgrade the system for state-wide sharing of physical resources (*LibraryLink*)

7.1 **DESCRIPTION**
This option combines the procurement of a shared state-wide LMS (component A) with an upgrade to the system for sharing physical resources between libraries (*LibraryLink*) (component C). There is no e-book/e-resource acquisition under this combination.

The shared state-wide LMS would include a quality core system specified to meet all the functional needs of a public library. In addition, it would include a range of add-on services and features provided by the vendor (and third party vendors) as described in section 2.2 (Component A). This includes SMS functionality, smart phone app, RFID interface capability, collection management, enhanced discovery, management reporting etc.

7.2 **RATIONALE AND BENEFITS**
This option combines the procurement of a state-wide LMS (and the likely savings) with an upgraded system for the physical state-wide sharing of library collection resources (to replace the dated *LibraryLink*).

A shared state-wide LMS would bring all Victorian library services up to a new and uniformly higher minimum level of service (in terms of discovery layer/experience and LMS functionality, apps etc.).

This option also retains total decision choice and flexibility for individual libraries. Under this option, all libraries retain the ability to elect not to participate in the shared state-wide LMS and retain (at their own cost) their existing LMS. They may also choose to apply their own ILL (physical resources) access policies.

7.3 **DISADVANTAGES/LIMITATIONS**
The significant disadvantage of this option is that it does not in any way address what is widely accepted to be the biggest challenge currently facing public libraries: that is, enabling improved user access to a quality e-book/e-resource collection.

7.4 **ESTIMATED COSTS AND SAVINGS**
It is estimated that this combination will cost between $18.47 million and $22.58 million over a seven year contract term (or between $2.64 million and $3.23 million on average annually).
8. CONCLUSION

The best combination of shared services options for Victorian public libraries is to pursue all three components described in this report (A, B and C).

Component A would result in significant net savings for libraries as well as bringing all libraries up to a uniformly higher level of service in terms of LMS capability and the search and discovery experience for library users.

Component B substantially addresses one of the biggest challenges facing libraries by enabling vastly easier access to an expanded range of e-books/e-content.

Component C would facilitate easier/more streamlined exchange (ILLs) of physical collection resources between libraries (for those libraries that want to allow that), within policy parameters that remain at the local library’s discretion. Under this combination, all libraries would still retain full local policy autonomy and flexibility/choice to elect to either participate or not. (However, it needs to be noted that the extent of any state-wide savings would be incrementally eroded with each individual library electing not to participate).

The next best shared services combination is to pursue components B and C only. This would mean there would be no state-wide LMS (per component A) and hence, no savings generated from collaborative procurement. The key advantage of this combination is that each individual library would still get to choose its own LMS, to be specified and contracted to reflect their own local needs and circumstances. Pursuing this combination would recognise that a level of library sector resistance has existed in the past to a universal state-wide LMS and the autonomy compromises that this necessarily involves.

This combination (B-C) also delivers the critical service level improvement of offering Victorians much better access to a quality state-wide e-content/e-book collection. Under this combination, search and discovery of the shared state-wide e-content collection would be a relatively seamless and an easy two-step search process compared to the current cumbersome arrangements for library e-content (an overtly separate ex-library search/discovery process on an external aggregator-owned platform). However, under this combination, with libraries continuing to operate off their own LMSs and discovery layers (of varying age, capability and sophistication), this would mean that search and discovery of the shared state-wide e-content collection would not be quite as seamless as it would otherwise be with a universal state-wide LMS.

This combination (B-C) also addresses the need to facilitate the ongoing exchange of physical collection resources and provides an upgrade to the LibraryLink system (component C).

The least-preferred shared services combination for Victorian public libraries is to pursue components A and C only. This would mean there would be a state-wide LMS (component A) with the significant savings generated from collaborative procurement. It would also address the need to facilitate the ongoing exchange of physical collection resources by providing an upgrade to the LibraryLink system (component C).

But the key disadvantage of this combination (A-C) is that it would fail to address what is universally acknowledged as the most critical challenge facing public libraries today: that is, enabling easy and seamless access for library users to a quality range of e-resources and e-content. For that reason, the A-C combination is not preferred.
Appendix A:

COMPONENT AND COMBINATION COST ESTIMATES:

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<thead>
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<th>Component Cost Estimates</th>
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<th>RANGE HIGH</th>
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</thead>
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<tr>
<td></td>
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<tr>
<td><strong>COMPONENT A:</strong></td>
<td></td>
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</tr>
<tr>
<td>Total Cost (seven years):</td>
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<tr>
<td>Years 1-4:</td>
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<tr>
<td><strong>COMPONENT B:</strong></td>
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<td>Total Cost (seven years):</td>
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<td><strong>COMPONENT C:</strong></td>
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<tr>
<td>Total Cost (seven years):</td>
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