

## 01. Publish data for unspecified use

Simply make data openly and freely available for unencumbered use by third parties.

### Description

**Activity** - A growing enthusiasm for open access and transparency has empowered some efforts simply to make data openly and freely available for unencumbered (including commercial) use by third parties. Government efforts in the USA, the UK and elsewhere provide clear examples of this trend, as do library-specific initiatives such as the Open Library.

*This use case differs from [UC2](#) because it is not about a specific publication format, whereas [UC2](#) is about Linked Data.*

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Actors** - Libraries, which **may** require institutional buy-in and **may** have contractual and licensing implications with respect to suppliers, partners, etc.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Data involved** - Potentially any library data, possibly combined with other metadata (such as course titles). Typically records and fields (tags) for which the institution feels rights and licensing issues are sufficiently well understood. See [UC2](#) for the 'linked data' alternative.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Data flow** - Data are placed online, either within the institution or via some third party such as Open Library. Data may be periodically refreshed, and it would typically be the responsibility of any organisation consuming the data to check for any updates.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Does this require Open Data** - There is no requirement for Open Data per se. However, if we presume that the rationale for publication is to ensure the widest possible dissemination then adoption of a generic open data license (such as Open Data Commons or CC0) is the most effective way to make the set of potential uses unambiguous. Restrictive licenses are counter-productive, as is making the data available without some explicit statement regarding potential utilisation. Locally developed licenses and statements regarding use should be avoided where possible as, although perhaps open

in spirit, these local variants complicate matters for those wishing to combine data from disparate sources.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Current Examples** - Open Library, CERN, the university and city libraries of Cologne, the university of Ghent

Part of use case: [01. Publish data for unspecified use](#) | [2 Comments](#)

## Benefits

**Institution** - (1) In line with institutional goals and mission with reference to disseminating knowledge, playing a role within the community, enabling innovation, enhancing the web of knowledge, etc; (2) attracts publicity and status for first movers.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Library Service** - (1) Creating the opportunity for third parties to develop local and wider services of value, some of which may potentially drive increased attention and traffic back to the library and its holdings; (2) opening up possibilities for integration with teaching and learning services

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Researchers** - (1) A building block in opening up access to large and unique collections of data; (2) potential for third party applications to become richer and more responsive to institutional collections, making those collections easier to access whilst also making the applications more useful.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Students** - The possibility of Google Scholar and other external services having greater knowledge of institutional holdings

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Replication** - High: Pioneers can document the necessary steps to initially extract data from various systems and to update to the data as necessary.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Case for not doing it** - Uncertainty. Once data are released online under an open license, third parties are explicitly permitted to take and reuse those data as they see fit. Even if the institution initially responsible for releasing the data changes its policy and either withdraws the data or relicenses it with more stringent terms, anyone who downloaded the original release remains able to continue using and redistributing it in perpetuity.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

## Motivation

**Principles** - The rationale is essentially philosophical. The institution or the library believes in the importance of openness, transparency and sharing, and is un-persuaded by arguments to preserve the status quo by keeping data private. For early adopters, publicity and status plus belief in opportunity arising from constructive disruption may play a part in the decision making process.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Costs** - Cost benefit is unlikely to be a significant motivation for this approach. However, doing this may represent a negative opportunity cost in diverting attention from another priority.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Services** - There is the possibility that a useful service may emerge from an external or internal party, including library users.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Rationale for not doing it** - (1) Uncertainty as to the legal status of the data; (2) discomfort with not being able to take the data back once it's released; (3) concern about how the data might be used, and how that might reflect upon the institution; (4) potential disruption to existing relationships, partnerships, and commercial arrangements; (5) simply insufficient reason to make it a priority.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Quite possibly, nothing at all.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) The originator of elements of the bibliographic records challenges release as open data [see also [UC2](#), [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC15](#), [UC16](#), [UC17](#)]; (3) Loss of future revenue [see also [UC2](#)]; (4) Lack of focus on purpose results in no use of available data, either due to lack of interest or inappropriate data formats or licensing.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) An ecosystem of enthusiastic developers emerges, keen and able to provide alternative means of accessing key institutional services via data dumps and APIs [see also [UC2](#), [UC16](#), [UC17](#)]; (3) Third-party tools (LibraryThing, Mendeley) get better and better, as they gain more data and more users – and as those users largely originate inside Universities, the institutions also benefit, although in ways that may be difficult to quantify [see also [UC2](#), [UC15](#)]; (4) Large pools of data create opportunities for the creation of regional, national and international services to drive stock management, etc. [see also [UC2](#)]

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Consequences of not doing it?** - Libraries seen at odds with moves to Open Data in the public sector.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - In keeping with the principles behind this act, the license should be explicit and as open and unencumbered as possible in order to facilitate genuine reuse. See the general guidance on [Licensing Issues](#) for further detail.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Model 1: A standard MARC export from the LMS, based on specified criteria. Additional exports on a regular basis.  
Model 2: Records exported from the LMS based on specified criteria transformed into one or more formats to make data as accessible as possible to a wide range of interested parties [see [UC16](#)]. Additional exports on a regular basis.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Lifecycle implications** - None are necessary, although the data will be of most value to the largest constituency if there is some regular process for refresh.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Hosting requirements** - Some server space to host the file; alternatively Open Library, Internet Archive, Connected Commons and others may host on your behalf.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Existing systems impact** - None

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Skills demands** - Subject to LMS support for export of MARC records based on specified criteria, this should fall within the capabilities of a systems librarian. Model 2 additionally requires ability to transform data between library specific format and more generic formats. This may be achieved via a third party application or through some basic local development. This would require experience beyond simply running LMS reports.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

## Costs

**Setup** - The necessary export capability for Model 1 should already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff. Model 2 may incur some additional costs in acquiring additional software, expertise, or external development effort.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Ongoing** - The costs associated with sustaining this capability are low, but will inevitably be affected by the frequency with which data updates must be supplied.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction.

Part of use case: [01. Publish data for unspecified use](#) | [Share your experience](#)

## 02. Publish open Linked Data for unspecified use

Make data openly and freely available as Linked Data.

### Description

**Activity** - A growing enthusiasm for open access and transparency has empowered some efforts to simply make data openly and freely available for unencumbered use by third parties. Government efforts in the USA, the UK and elsewhere provide clear examples of this trend, as do library-specific initiatives such as the [Open Library](#). This is a variant of [UC1](#) involving Linked Data.

*This use case differs from [UC1](#) because it is specifically about publication as Linked Data format whereas [UC1](#) is about format neutral.*

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Actors** - Libraries, which MAY require institutional buy-in and MAY have contractual and licensing implications with respect to suppliers, partners, etc.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Data involved** - Potentially any library data, possibly combined (or linked) with other metadata (such as course titles). Typically records and fields (tags) for which the institution feels rights and licensing issues are sufficiently well understood.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Data flow** - Data are placed online, either within the institution or via some third party such as the Talis Platform. Data may be periodically refreshed, and it would typically be the responsibility of any organisation consuming the data to check for any updates.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Does this require Open Data** - There is no requirement for Open Data per se. However, if we presume that the rationale for publication is to ensure the widest possible dissemination then adoption of a generic open data license (see Rights and Licensing Issues) is the most effective way to make the set of potential uses unambiguous. Restrictive licenses are counter-productive, as is making the data available without some explicit statement regarding potential utilisation. Locally developed licenses and statements regarding use should be avoided where possible as, although perhaps open in spirit, these local variants complicate matters for those wishing to combine data from disparate sources.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Current Examples** - Libris, National Széchenyi Library, Freebase

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

### Benefits

**Institution** - (1) In line with institutional goals and mission with reference to disseminating knowledge, playing a role within the community, enabling innovation, etc; (2) Attracts publicity and status for first movers.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Library Service** - (1) Creating the opportunity for third parties to develop local and wider services of value, some of which may potentially drive increased attention and traffic back to the library and its holdings; (2) Enables enrichment of library data from other Linked Data sources such as <http://id.loc.gov/> (includes Library of Congress Subject Headings as Linked Data), <http://viaf.org> (Virtual International Authority File available as Linked Data, documented at <http://outgoing.typepad.com/outgoing/2010/05/viafs-new-linked-data.html>), <http://dbpedia.org> (Linked Data representation of Wikipedia); (3) Can increase exposure of library collection to web search engines.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Researchers** - (1) A building block in opening up access to large and unique collections of data; (2) potential for third party applications to become richer and more responsive to institutional collections, making those collections easier to access whilst also making the applications more useful.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Students** - (1) The possibility of Google Scholar and other external services having greater knowledge of institutional holdings; (2) local discovery becomes easier and richer due to enhanced library data (from other Linked Data sources).

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Replication** - Medium: Pioneers can document the necessary steps to extract data from various systems, and document decisions regarding transformation of bibliographic data into Linked Data. However, decisions made by one institution may not be immediately transferrable to others, and 'best practice' for representing bibliographic data as Linked Data is not yet established.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Case for not doing it** - Uncertainty. Once data are released online under an open license, third parties are explicitly permitted to take and reuse those data as they see fit. Even if the institution initially responsible for releasing the data changes its policy and either withdraws the data or relicenses it with more stringent terms, anyone who downloaded the original release remains able to continue using and redistributing it in perpetuity.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

## Motivation

**Principles** - The rationale is essentially philosophical. The institution or the library believes in the importance of openness, transparency and sharing, and is un-persuaded by arguments to preserve the status quo by keeping data private. Additionally the institution of the library believes that it is important to integrate library data into the fabric of the web, and that Linked Data is the best way of achieving this. For early adopters, publicity and status may play a not-insignificant part in the decision making process.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Costs** - Cost benefit is unlikely to be a significant motivation for this approach, especially as this approach may require more effort than [UC1](#). However, doing this may represent an opportunity cost in diverting attention from another priority.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Services** - There is the possibility that a useful service may emerge from an external or internal party.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Rationale for not doing it** - (1) Uncertainty as to the legal status of the data; (2) discomfort with not being able to take the data back once it's released; (3) concern about how the data might be used, and how that might reflect upon the institution; (4) potential disruption to existing relationships, partnerships, and commercial arrangements; (5) simply insufficient reason to make it a priority.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Library bibliographic data will be linked into the wider web of Linked Data.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC15](#), [UC16](#), [UC17](#)]; (3) Loss of future revenue [see also [UC1](#)]; (4) While there is currently some momentum behind the Linked Data movement, many of the expected benefits remain, to a large extent, unproven, and some commentators believe that the approach is too complex to gain widespread adoption.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) An ecosystem of enthusiastic developers emerges, keen and able to provide alternative means of accessing key institutional services using Linked Data representations [see also [UC1](#), [UC16](#), [UC17](#)]; (3) Third-party tools (LibraryThing, Mendeley) get better and better, as they gain more data and more users – and as those users largely originate inside Universities, the institutions also benefit, although in ways that may be difficult to quantify [see also [UC1](#), [UC15](#)]; (4) Large pools of data create opportunities for the creation of regional, national and international services to drive stock management, etc.; [see also [UC1](#)] (5) Bibliographic data becomes searchable via semantic web technologies; (6) Libraries establish position as key players in the Linked Data/web of data space; (7) Libraries benefit from other Linked Data sources providing richer metadata and related exploration of the collections.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Consequences of not doing it?** - (1) Libraries seen at odds with moves to Open Data in the public sector; (2) Libraries become sidelined as metadata experts and providers as others expose data on the web.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - In keeping with the principles behind this act, the license should be explicit and as open and unencumbered as possible

in order to facilitate genuine reuse. See the general guidance on [Licensing Issues](#) for further detail.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Data transformed from MARC or local storage format to RDF, which is then serialised in a number of ways (e.g. N3, XML, JSON). Most commonly this would then be exposed via a triple store with a SPARQL endpoint, and via a RESTful web interface which would usually provide both human readable versions of the data (i.e. html pages) as well as machine-parsable data (i.e. RDF).

Key to this process will be choosing appropriate ontologies to represent the data. While there is some previous practice in this area, (see <http://dcpapers.dublincore.org/ojs/pubs/article/viewArticle/927>), it is probably too early to see this as 'best practice' for representing bibliographic data as Linked Data. Common vocabularies used in current implementations are:

- **Bibliontology** (<http://purl.org/ontology/bibo/>)
- **DC-RDF** (<http://purl.org/dc/elements/1.1/>)
- **FOAF** (<http://xmlns.com/foaf/spec/>)
- **SKOS** (<http://www.w3.org/2004/02/skos/>)

As libraries tend to hold information on non-bibliographic resources as well (e.g. audio-visual material), it may be necessary to represent these using more appropriate vocabularies (e.g. <http://wiki.musicbrainz.org/RDF> for recorded music).

A W3C 'incubator group' for Library Linked Data which is currently (May 2010 – May 2011) investigating "how existing building blocks of librarianship, such as metadata models, metadata schemas, standards and protocols for building interoperability and library systems and networked environments, encourage libraries to bring their content, and generally re-orient their approaches to data interoperability towards the Web" (<http://www.w3.org/2005/Incubator/ld/>)

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Lifecycle implications** - Examples to date have merged the human-readable web interface to the library catalogue (OPAC) and the machine-readable RDF, with the implication that this is an up to date representation of the library catalogue, possibly refreshed daily or even more frequently.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Hosting requirements** - There are a variety of options, but the minimum would be space to store the RDF representation of the data, and a web server to serve data on request. However, when publishing this type of data it is becoming common to provide a SPARQL endpoint as well as a web interface, which further suggests the use of a triple store to host the data. An alternative approach is to outsource hosting to a third party, such as the Talis Platform.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Existing systems impact** - It is currently unlikely that existing systems will support publication of bibliographic data as Linked Data. It would be

necessary to create the relevant routines to extract data from existing systems, transform into RDF, and publish either directly onto the web, or via a triple store.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Skills demands** - There is likely to be a steep learning curve for those engaging in the publication of bibliographic data as Linked Data. An understanding of both bibliographic data in traditional formats (e.g. MARC) and RDF will be required, which is likely to mean a high degree of collaboration between library staff and technical staff. A good understanding of http, configuration of web servers, and possibly triple store technology will be required, which implies a high level of technical expertise.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

## Costs

**Setup** - While much of the software needed to publish Linked Data is Open Source, the time needed to gain the necessary expertise and setup the necessary infrastructure could be significant. In the short-term, outsourcing the provision of the necessary infrastructure could prove more cost effective.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Ongoing** - Once the investment in the initial setup has been done, the costs associated with sustaining this capability are likely to be low. If the activity has been outsourced there are likely to be higher ongoing costs in the medium to long-term. However, it should be noted that as the sector understanding of representing bibliographic data as Linked Data changes, it may be that earlier adopters will need to revisit implementations to bring their practice in line with more recent developments elsewhere.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction.

Part of use case: [02. Publish open Linked Data for unspecified use](#) | [Share your experience](#)

## 03. Supply data for Physical Union Catalogue

Supply bibliographic records containing holdings data to a Union Catalogue service in order to enhance discovery, location and delivery services.

### Description

**Activity** - The supply under open data license of bibliographic records containing holdings data to a Union Catalogue service in order to enhance discovery, location and delivery services for users, especially for special collections. This may also involve a collaborative or copy cataloguing opportunity [see [UC11](#)]. Compare with the variant approaches of [UC4](#) and [UC5](#).

*This use case differs from [UC4](#) because it is about the source library*

*adopting open licensing to open up possibilities for exploitation of the data, whereas [UC4](#) is about the Union Catalogue organizing the licensing.*

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Actors** - Libraries; the external union catalogue service (which may be a shared service)

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Data involved** - Bibliographic records, typically containing holdings data and potentially use data

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Data flow** - Bibliographic and holdings records are transferred from the member institutions to the service, where they are imported in to the Union Catalogue. The service provider may undertake some enhancement such as linking book jackets or improving records, and the enhanced records may be supplied back to the source institutions or be made available to all contributing institutions.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Does this require Open Data** - If the records are supplied under an open data license, the scope for exploitation by the Union Catalogue, contributing institutions, third parties and users will be unambiguous.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Current Examples** - We are not aware of examples based on open data, though this approach could be adopted by such as Copac and Suncat in the UK.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

## Benefits

**Institution** - Improved learning and research experience

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Library Service** - Improved service to users including the possibility of value added services based on open use of records

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Researchers** - Potential access to more extensive collections or greater copy availability from other universities and research institutions

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Students** - Potential access to more extensive collections or greater copy availability from other universities

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Replication** - The bibliographic data extraction process will be of use for other services requiring conditional release of records. Appropriate generic licensing as opposed to a proprietary agreement with the service provider may open up other shared service or third party service opportunities.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Case for not doing it** - Libraries may be wary of their own or the collective data being re-sold to them or devalued in terms of quality by a downstream

player.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

## Motivation

**Principles** - Improved access through discoverability of own resources and access to resources held by partner institutions. Making bibliographic data open for re-use increases those opportunities both within and beyond the Union Catalogue service; doing so at source simplifies the process of developing new services.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Services** - Enhancement of the Union Catalogue service, leading to fuller use of the local collection and exploitation of partner collections

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Rationale for not doing it** - (1) Not joining a Union Catalogue Service – perhaps believing that library domain services do not compete effectively with generic search engines; (2) Not supplying the records as Open Data – uncertainty about the rights attached to records not originated locally, such as those wholly or partially derived from a collaborative cataloguing service, from publishers or from such as a national library.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - (1) Staff and students will have the opportunity to access an existing library service in a different way; (2) Additional discovery channels will add value to the user experience and may increase demand on some areas of the local collection, whilst displacing demand from other areas; (3) Presence in a centralised union catalogue will increase visibility of library data to a wider audience.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Damage to institutional reputation through provision of substandard product by a third party [see also [UC4](#), [UC5](#), [UC16](#), [UC17](#)]; (3) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC15](#), [UC16](#), [UC17](#)]; (4) Increased visibility of collection leads to demand beyond local resources ability to supply [see also [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)].

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Shift to outsourced cataloguing and OPAC services [see also [UC4](#), [UC5](#), [UC9](#), [UC11](#)]; (3) Increased use of library collection by internal and external users through improved discovery services [see also [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)]; (4) Sufficiently large Centralised Union Catalogues to provide 'web-scale' opportunities [see also [UC4](#), [UC5](#)].

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Consequences of not doing it?** - (1) Reduced exposure of library collection; (2) Centralised Union service put at risk if significant numbers of

libraries do not contribute.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This use case requires the explicit transfer of records to a third party, and will typically be governed by some form of contractual relationship. Whether that transfer is classed as 'use' or 'supply' will depend upon the nature of the relationship between the organizations involved. See <http://www.jisclegal.ac.uk/Projects/TransferandUseofBibliographicRecords.aspx>.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - All models require engagement with actual or potential union catalogue providers to decide most appropriate record format, although Union catalogue services are highly likely to be familiar with MARC format.

- Model 1: A standard MARC export from the LMS, based on specified criteria. Additional exports on a regular basis representing either a full export or just changes (additions, updates and deletions) based on the original export.
- Model 2: Records exported from the LMS based on specified criteria transformed into one or more formats to make data as accessible as possible to a wide range of interested parties [see Use Case 16] Additional exports on a regular basis which represent either a full export or just changes (additions, updates and deletions) based on the original export.
- Model 3: The use of OAI-PMH to harvest either Dublin Core or MARC-XML records with subsequent harvesting to create/update/delete records.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

### **Lifecycle implications** -

- Models 1 & 2: Regular supply of updated records, either by full export or changes (additions, updates and deletions) based on the original export.
- Model 3: Continued running of OAI-PMH target.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Hosting requirements** - For Models 1 and 2, hosting may be the responsibility of the shared service; or there may be a requirement for local hosting, from which data can periodically be retrieved by the shared service. For Model 3, provision of an OAI-PMH target would be required.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

**Existing systems impact** - None other than for Model 3 for which existing systems would need to support OAI-PMH.

Part of use case: [03. Supply data for Physical Union Catalogue](#) | [Share your experience](#)

### **Skills demands** -

- Models 1 & 2: Subject to LMS support of export of MARC records based on specified criteria, this should fall within the capabilities of a systems

librarian. If 'differential' updates required by Union catalogue service, it would either be necessary for this function to be available in the LMS, or for some basic development to be done locally to produce differential update files (additions, updates, deletions). In the latter case this would require experience beyond simply running LMS reports, although should be within the capabilities of a systems librarian or local IT staff.

- **Model 2:** An ability to transform data between library specific format and more generic formats. This may be achieved via a third party application or through some basic development undertaken locally. This would require experience beyond simply running LMS reports, although may be within the capabilities of a systems librarian or local IT staff.
- **Model 3:** Running an OAI-PMH service. If this is provided by the LMS this would simply require configuration and should fall within the capabilities of a systems librarian.

Part of use case: [03. Supply data for Physical Union Catalogue | Share your experience](#)

## Costs

**Setup** - The necessary export capability should already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [03. Supply data for Physical Union Catalogue | Share your experience](#)

**Ongoing** - The costs associated with sustaining this capability are low, but will inevitably be affected by the frequency with which data updates must be supplied.

Part of use case: [03. Supply data for Physical Union Catalogue | Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, supplying data on a case-by-case basis without adopting an open license or permissive contract may result in an ongoing requirement to receive, assess, and respond to requests for data from third parties.

Part of use case: [03. Supply data for Physical Union Catalogue | Share your experience](#)

## 04. Allow Physical Union Catalogue to publish data

A union catalogue publishes bibliographic records as open data on behalf of its contributing libraries.

### Description

**Activity** - The supply under open license of bibliographic records from a union catalogue on behalf of its contributing libraries. The open licensing and the open supply of records are undertaken by the union catalogue service. Compare with the variant approaches of [UC3](#) and [UC5](#).

*This use case differs from [UC3](#) because it is about the union catalogue organizing open licensing whereas [UC3](#) is about the source library initiating the licensing.*

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Actors** - Libraries, the union catalogue, third parties

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Data involved** - Bibliographic records, perhaps containing holdings and use data

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Data flow** - Bibliographic and holdings records are transferred from the member institutions to the central service, where they are imported in to the Union Catalogue. The service provider may undertake some enhancement and de-duplication activity, with the resulting union database being made available to third parties for exploitation.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Does this require Open Data** - Not necessary, but if the records are supplied under an open data license, the scope for exploitation by the Union Catalogue, contributing institutions, third parties and users will be unambiguous.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Current Examples** - North Rhine-Westphalia Union Catalogue (HBZ); this approach could be adopted by such as Copac and Suncat in the UK.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## Benefits

**Institution** - Supporting scholarship beyond the institution, without needing to invest in local systems and support; the records are supplied in the existing manner to the union catalogue service.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Library Service** - Something for nothing. Improved service to users including the possibility of value added services based on open use of records

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Researchers** - Increasing flexibility and choice in accessing institutional services, as third parties construct services on the data

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Students** - Increasing flexibility and choice in accessing institutional services, as third parties construct services on the data

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Replication** - The bibliographic data extraction process will be of use for other services requiring conditional release of records. Appropriate generic licensing as opposed to a proprietary agreement with the service provider may open up other shared service or third party service opportunities.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Case for not doing it** - Participating libraries may prefer to retain control over the ways in which their data are disseminated to third parties. Those running the union catalogue may not wish to absorb liabilities from member

libraries with respect to the provenance of data they contribute to the pool.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## Motivation

**Principles** - Improved access through discoverability of own resources and access to resources held by partner institutions. Making bibliographic data open for re-use increases those opportunities both within and beyond the Union Catalogue service.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Costs** - Reduces the costs for providers and consumers; rather than dealing with individual member libraries, the license and supply relationship is with the union catalogue provider.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Services** - By making data available in ways that users prefer, usage and satisfaction may rise.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Rationale for not doing it** - Individual institutions may prefer to retain a degree of control over the ways in which their data are exposed to third parties. The union catalogue may not wish to absorb poorly understood liabilities on behalf of contributing libraries.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - (1) The centralised union catalogue will take on aspects of infrastructure, cost and possibly risk regarding the publication of Open Bibliographic data; (2) Staff and students will have the opportunity to access an existing library service in a different way; (3) Additional discovery channels will add value to the user experience and may increase demand on some areas of the local collection, whilst displacing demand from other areas; (4) Presence in a centralised union catalogue will increase visibility of library data to a wider audience.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Damage to institutional reputation through provision of substandard product by a third party [see also [UC3](#), [UC5](#), [UC16](#), [UC17](#)]; (3) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC3](#), [UC5](#), [UC6](#), [UC7](#), [UC15](#), [UC16](#), [UC17](#)]; (4) Increased visibility of collection leads to demand beyond local resources ability to supply [see also [UC3](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)].

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Shift to outsourced cataloguing and OPAC services [see also [UC3](#), [UC5](#), [UC9](#), [UC11](#)]; (3) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)]; (4) Sufficiently large Centralised Union Catalogues to provide 'web-scale' opportunities [see also [UC3](#), [UC5](#)]; (5) Publication of a mass of data through

central point may help manage risk of challenge from originator of elements of the bibliographic records

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Consequences of not doing it?** - None that are significant.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This use case requires the explicit transfer of records to a third party, and will typically be governed by some form of contractual relationship. Whether that transfer is classed as 'use' or 'supply' will depend upon the nature of the relationship between the organizations involved. See <http://www.jisclegal.ac.uk/Projects/TransferandUseofBibliographicRecords.aspx>.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Data are presumably provided to the union catalogue using some variant of MARC [see [UC3](#)], with the union catalogue service taking on any requirement to reformat for downstream reuse.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Lifecycle implications** - As institutions are simply granting a set of additional permissions to a union catalogue service with which they are already associated, there are no additional hosting implications.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Hosting requirements** - As institutions are simply granting a set of additional permissions to a union catalogue service with which they are already associated, there are no additional systems implications.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Existing systems impact** - As institutions are simply granting a set of additional permissions to a union catalogue service with which they are already associated, there are no additional lifecycle implications.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Skills demands** - As institutions are simply granting a set of additional permissions to a union catalogue service with which they are already associated, there are no additional staffing implications.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## Costs

**Setup** - As institutions are simply granting a set of additional permissions to a union catalogue service with which they are already associated, there are unlikely to be additional setup costs. Depending upon the nature of the data to be shared, and the form of any existing contractual relationship, there may be a need for some legal costs.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Ongoing** - As institutions are simply granting a set of additional permissions to a union catalogue service with which they are already associated, there are no additional ongoing costs.

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

**Cost of doing nothing** - None

Part of use case: [04. Allow Physical Union Catalogue to publish data](#) | [Share your experience](#)

## 05. Expose data for federation into Virtual Union Catalogue

Provision of access under open data license to bibliographic records through a virtual Union Catalogue service in order to enhance discovery, location and delivery services for users, especially for special collections.

### Description

**Activity** - Provision of access under open data license to bibliographic records through a virtual Union Catalogue service in order to enhance discovery, location and delivery services for users, especially for special collections. This may also involve a collaborative or copy cataloguing opportunity (see [UC11](#)). Compare with the variant approaches of [UC3](#) and [UC4](#).

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Actors** - Libraries; the external service (may be a shared service within the sector)

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Data involved** - Bibliographic records, typically containing holdings data and potentially use data

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Data flow** - Bibliographic and holdings records are made available to the central service by member institutions, where they are cross-searched to give users the appearance of a single Union Catalogue.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Does this require Open Data** - Not necessary, but if the records are accessed under an open data license, the scope for exploitation by the Union Catalogue, contributing institutions, third parties and users will be unambiguous.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Current Examples** - Canadian National Union Catalogue

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## Benefits

**Institution** - Improved learning and research experience.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Library Service** - Something for nothing. Improved service to users including the possibility of value added services based on open use of records

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Researchers** - Potential access to more extensive collections or greater copy availability from other universities and research institutions

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Students** - Potential access to more extensive collections or greater copy availability from other universities

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Replication** - The bibliographic data publishing process will be of use for other services requiring access to records. Appropriate generic licensing as opposed to a proprietary agreement with the service provider may open up other shared service or third party service opportunities.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Case for not doing it** - Libraries may be wary of their own or the collective data being re-sold to them or devalued in terms of quality by a downstream player.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## Motivation

**Principles** - Improved access through discoverability of own resources and access to resources held by partner institutions. Making bibliographic data open for re-use increases those opportunities both within and beyond the Union Catalogue service.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Costs** - Reduces the costs for providers and consumers; rather than dealing with individual member libraries, the license and service relationship is mediated by the union catalogue provider.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Services** - By making data available in ways that users prefer, usage and satisfaction may rise.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Rationale for not doing it** - (1) Not joining a Union Catalogue Service – believing that library domain services do not compete effectively with generic search engines; (2) Not supplying the records as Open Data – uncertainty about the rights attached to records not originated locally, such as those wholly or partially derived from a collaborative cataloguing service, from publishers or from such as a national library.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Staff and students will have the opportunity to access an existing library service in a different way.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Damage to institutional reputation through provision of substandard product by a third party [see also [UC3](#), [UC4](#), [UC16](#), [UC17](#)]; (3) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC3](#), [UC4](#), [UC6](#), [UC7](#), [UC15](#), [UC16](#), [UC17](#)]; (4) Increased visibility of collection leads to demand beyond local resources ability to supply [see also [UC3](#), [UC4](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)].

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Shift to outsourced cataloguing and OPAC services [see also [UC3](#), [UC4](#), [UC9](#), [UC11](#)]; (3) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)]; (4) Sufficiently large Centralised Union Catalogues to provide 'web-scale' opportunities [see also [UC3](#), [UC4](#)]

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Consequences of not doing it?** - None that are significant

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This use case requires the granting (whether implicit or explicit) of data access and usage rights to a third party. Whether that is classed as 'use' or 'supply' will depend upon the nature of the relationship between the organizations involved. See <http://www.jisclegal.ac.uk/Projects/TransferandUseofBibliographicRecords.aspx>.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Z39.50, SRU, SRW, locally developed API?

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

[experience](#)

**Lifecycle implications** - Potentially significant, as local infrastructure needs to handle the overhead of every query passed along by the union catalogue.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Hosting requirements** - Potentially significant, as local infrastructure needs to handle the overhead of every query passed along by the union catalogue.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Existing systems impact** - Continued support and maintenance of the local target, plus development work to align with new requirements from the union catalogue.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Skills demands** - Staff concerned with maintaining the union catalogue are likely to possess all the necessary skills to maintain Z39.50-style targets, where these are well defined and provided by their existing system provider. Specific use cases may require local (or vendor) development work, with cost or skill implications.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## Costs

**Setup** - The necessary 'target' capability may already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Ongoing** - The infrastructural costs associated with sustaining this capability may be relatively low, but will inevitably be directly affected by the efficiency and popularity of the union catalogue itself.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, supplying data on a case-by-case basis without adopting an open license or permissive contract may result in an ongoing requirement to receive, assess, and respond to requests for data from third parties.

Part of use case: [05. Expose data for federation into Virtual Union Catalogue](#) | [Share your experience](#)

## 06. Publish grey literature data

The supply under open license of bibliographic records describing institutional grey literature.

## Description

**Activity** - The supply under open license of bibliographic records describing institutional grey literature.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Actors** - Library, academic authors of grey literature, repository managers elsewhere in institution

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Data involved** - Bibliographic records describing institutional grey literature; may also involve full text of documents and associated research data.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Data flow** - Data on grey literature collected from across the institution, typically in the context of an institutional repository.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Does this require Open Data** - Not necessary, although explicit open licenses for set of metadata, full text and associated research data will make use and re-use easier.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Current Examples** - University of Ghent, University of Southampton (ECS)

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## Benefits

**Institution** - (1) Improved learning and research experience; (2) Marketing, through visibility of institutional outputs

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Library Service** - (1) Improved service to users; (2) Increased visibility to key stakeholders inside the institution

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Researchers** - Potential to increase visibility of institutional holdings and to amplify own research

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Students** - Potential to increase visibility of institutional holdings

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Replication** - This approach applies to a wide range of teaching, learning and research outputs that may have little or no visibility through current discovery interfaces

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Case for not doing it** - Too difficult to be comprehensive, opening up an open-ended commitment

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## Motivation

**Principles** - Raise internal and external visibility of institutional resources not formally published elsewhere.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Costs** - Delivers value to the institution by increasing visibility of expensively created institutional resources.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Services** - Enhances mission of institutional repositories

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Rationale for not doing it** - Diverts the attention from more pressing concerns, in repositories and contributing researcher groups

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - (1) Institutional researchers will be able to increase visibility of their work; (2) Colleagues and students will have access to material not available by other means.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC3](#), [UC4](#), [UC5](#), [UC7](#), [UC15](#), [UC16](#), [UC17](#)]; (3) Increased visibility of collection leads to demand beyond local resources ability to supply [see also [UC3](#), [UC4](#), [UC5](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)]; (4) If 'full-text' items are included in the data, there is a risk that any publishers of the material may challenge the release as open data.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Increased use of collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC5](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)]

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Consequences of not doing it?** - Grey literature is by definition harder to discover through convention discovery routes, and is likely to be under utilised if not adequately exposed to discovery services.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - Some grey literature comprises eprints and preprints for material published elsewhere; there is the potential for inadvertently contravening licenses and publishing agreements. Some grey literature comprises early results and analysis from research; there is the potential to dilute the impact of later publications, or to release contradictory results.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Dublin Core, for dissemination via an OAI repository?

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Lifecycle implications** - Modest; infrastructure to support an institutional OAI repository.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Hosting requirements** - Relatively minor

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Existing systems impact** - There is an ongoing requirement to encourage deposition and use.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Skills demands** - Configuring an OAI repository is relatively straightforward. Evangelising deposition into the repository is a harder and more of a long term task.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## Costs

**Setup** - OAI repository software is relatively robust, and there are a number of products from which to choose. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Ongoing** - The infrastructural costs associated with sustaining this capability should be relatively low. The human cost of encouraging deposition and use is more significant.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, as more institutions set up systems to promote their activities, those without a strategic approach to dissemination of grey literature may well begin to appear less active.

Part of use case: [06. Publish grey literature data](#) | [Share your experience](#)

## 07. Contribute data to Google Scholar

The supply under open license of bibliographic records containing holdings data to Google in order to enhance discovery, location and delivery services for users.

### Description

**Activity** - The supply under open license of bibliographic records containing

holdings data to Google in order to enhance discovery, location and delivery services for users.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

### **Actors** - Library; Google

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Data involved** - Bibliographic records containing holdings data. Google supports this for data published from link resolvers (aimed at electronic resources), the details are available at <http://scholar.google.com/intl/en/scholar/libraries.html>). Currently Google seems to only support links to library printed holdings via OCLC WorldCat, although it would seem logical that the current harvesting of electronic holdings information could be expanded to print holdings through negotiation with Google.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Data flow** - Bibliographic data, plus details of link resolvers etc, are provided to Google. Robots refresh Google's crawl of the data 'periodically.'

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Does this require Open Data** - Many university libraries already allow Google to harvest holdings data from their link resolvers, so while Open data is not necessary, it would establish an interesting principle in the supply chain.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

### **Current Examples** - Google Scholar

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## Benefits

**Institution** - (1) Improved learning and research experience; (2) Marketing, through visibility of institutional holdings via Google

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Library Service** - Something for nothing, delivering improved service to users

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Researchers** - Potential to increase visibility of institutional holdings via Google rather than via less widely used institutional systems.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Students** - Potential to increase visibility of institutional holdings via Google rather than via less widely used institutional systems.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Case for not doing it** - Libraries may be wary of losing control over their own data and the user experience offered to their customers.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## Motivation

**Principles** - Improved access through discoverability of own resources and equivalent access to resources held by partner institutions

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Costs** - Delivers value to library patrons by raising the web-scale visibility of holdings, free of charge.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Rationale for not doing it** - Diverts the attention of library systems staff from more pressing concerns.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - (1) Staff and students will have the opportunity to access an existing library service in a different way; (2) Additional discovery channels will add value to the user experience and may increase demand on some areas of the local collection, whilst displacing demand from other areas; (3) Presence in Google Scholar will increase visibility of library data to a wider audience.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC15](#), [UC16](#), [UC17](#)]; (3) Increased visibility of collection leads to demand beyond local resources ability to supply [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)]

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC9](#), [UC13](#), [UC16](#), [UC17](#)].

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Consequences of not doing it?** - The institution appears less visible – and less relevant – than peers that have chosen to participate

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - The transfer of rights, and associated licensing issues, are not always clearly described by Google. This may cause concern.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - The format Google currently support for institutional holdings information is documented at [http://scholar.google.com/intl/en/scholar/institutional\\_holdings.xml](http://scholar.google.com/intl/en/scholar/institutional_holdings.xml).

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Lifecycle implications** - Minor; provision of modest file storage to host periodic data dumps for crawling by Google.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Hosting requirements** - Relatively minor, unless local link resolvers etc are poorly configured and accept requests from all visitors

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Existing systems impact** - Minor

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Skills demands** - Working with existing vendors, local systems staff probably possess the necessary skills to modify link resolvers, produce periodic data dumps, etc.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## Costs

**Setup** - The necessary 'export' and link resolver capabilities may already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Ongoing** - The infrastructural costs associated with sustaining this capability should be relatively low.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, as more institutions participate in Google Scholar there may be a detrimental effect upon those institutions that choose not to have visibility through this service.

Part of use case: [07. Contribute data to Google Scholar](#) | [Share your experience](#)

## 08. Publish activity data

The publication of library activity data, typically at 'Title' level, including the number of transactions such as loans by time period (e.g. Academic Year).

### Description

**Activity** - The publication of library activity data, typically at 'Title' level, including the number of transactions such as loans by time period (e.g. Academic Year). This may involve links to user courses in order to support more finely tuned analysis (i.e. activity per Title per period per course). This data will typically be used to make recommendations to users ('Users like you borrowed ...') and to provide management information (stock optimisation, shelf locations, short loan designation, purchasing recommendations – see [UC9](#)).

This is related to but does not include the harvesting of e-journal activity data from Link Resolver usage logs, as undertaken by such as the MESUR project and the ExLibris bX service.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Actors** - Libraries; individuals or organisations that wish to process and use the data

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Data involved** - Bibliographic records (may be partial as the downstream applications may not require full records) containing activity data (typically loans, but may also be requests, downloads, searches)

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Data flow** - Extract from catalogue and make generally available for download or supply directly to a processing organization. This is a one-way process.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Does this require Open Data** - If the records are supplied under an open data license, the scope for exploitation will be unambiguous; otherwise different licensing constraints may need to be applied depending on use.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Current Examples** - University of Huddersfield and others in the JISC MOSAIC project

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## Benefits

**Institution** - Improved information to assist in stock / collection management; enhanced learning and research experience

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Library Service** - Improved service to users including capacity to meet and to stimulate demand (stock, shelving, loan terms)

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Researchers** - Access to the behaviour of peers may be especially valuable in the long tail of specialization and in interdisciplinary research

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Students** - Recommendations derived from the behaviour of peers (past and present, here and elsewhere) represent the type of practical support expected from 'modern' online services

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Replication** - Data generated for management information can also be used to make recommendations and vice versa

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Case for not doing it** - (1) Effort required and expectation generated may potentially be a distraction; (2) Institutions should not encourage a crowd sourced copycat attitude to study and scholarship; (3) Syllabi differ from

place to place and time to time, so comparisons are potentially misleading.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## Motivation

**Principles** - Activity data is of interest for both collection management and user recommendations. Larger scale data derived from multiple institutions offers the possibility of more useful analyses and recommendations.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Costs** - Cost benefits may be derived from improved collection management

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Services** - Management information and user recommendation services covering multiple institutions leading to better purchasing and utilisation

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Rationale for not doing it** - Caution regarding the publication of data that could offer competitive advantage (e.g. books used as a proxy for reading lists) or damage reputation (e.g. comparative levels of borrowing) or lead to increased demand and therefore pressure on stock and services.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - (1) Greater use of library stock by undergraduates (as evidenced at Huddersfield); (2) better targeted purchasing of stock and electronic access arrangements.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Demand for harder to service data – for example, course linked recommendations ('users like you'), sequential borrowing patterns ('users borrowed next'), diverse activity (e.g. search as well as loan); (3) Concerns (founded or not) raised about potential misuse of 'personal' data.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Consequences of not doing it?** - None other than the loss of potential benefits to the user and in collection management. It is arguable that in the cases of large institutions and major subject areas, activity volumes can support a local service with no need to share data.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This use case involves the transfer of some data to a third party. As bibliographic records need only contain enough data to identify the item uniquely (e.g. a minimum of ISBN and Title), there should

be no significant issues with commercial bibliographic record suppliers. The more significant legal issues relate to Data Protection, and it will be important to follow normal data protection practices in order to ensure that unauthorized organizations do not gain improper access to personally identifiable data.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - MARC is not a useful format unless specifically demanded by a supplier. Data can be extracted in tagged and delimited formats readily exported from LMS or other logs. However libraries may consider publishing their bibliographic data in formats more accessible to developers; for example, the JISC MOSAIC project recommended an XML- based schema.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Lifecycle implications** - Involves the incremental supply of updated and new records. Annual or termly publication would suit most purposes other than the demands of students to know what their peers are doing right now (which may best be serviced locally from the LMS).

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Hosting requirements** - The published data will be small but will still need to be accessible for download.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Existing systems impact** - Not all LMS systems log activity, even for loans; some libraries will need to turn on the logging; there may be demands to integrate with borrower course codes; not all activity takes place in the LMS, though the LMS is the recommended place to start.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Skills demands** - Subject to LMS support of a loans log, this will fall within the capabilities of a systems librarian. More ambitious integration with course codes or other forms of activity data may need additional skills.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## Costs

**Setup** - The loans log and export software should be part of the local LMS.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Ongoing** - Low, subject to the regularity of records supply

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

**Cost of doing nothing** - No extra costs will be incurred by not doing it. However, doing it without making the data open may generate an ongoing requirement to address requests and to resolve rights issues.

Part of use case: [08. Publish activity data](#) | [Share your experience](#)

## 09. Supply holdings data for Collection Management

The supply of records containing holdings data to a shared service in order to support collection management.

### Description

**Activity** - The supply of records containing holdings data to a shared service in order to support collection management and to optimize holdings.

Libraries face increasing pressures on space, and initiatives such as the UK Research Reserve seek to enable holdings decisions on a larger scale than the individual institution. Holdings records (and some of their associated bibliographic information) are transferred to an external entity, which uses these records to inform decisions.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Actors** - Libraries, which MAY require institutional buy-in, and the external service (possibly a shared service within the sector)

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Data involved** - Bibliographic records containing holdings data

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Data flow** - Bibliographic and holdings records are transferred from the member institutions to the service, where they can be analysed. Whether these combined records are available for local management purposes or supplied back to member institutions depends on the service design.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Does this require Open Data** - Not essential, as use by the external service and potentially by the other partners can be closed.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Current Examples** - We are not aware of examples based on open data, though this approach could be adopted by such as UK Research Reserve.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

### Benefits

**Institution** - Free library space and reduce acquisition costs

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Library Service** - Free shelf space and improve collection management

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Researchers** - Potential access to more extensive collections from other universities

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Students** - Potential access to more extensive collections from other universities

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Replication** - The bibliographic data extraction process will be of use for other services requiring conditional release of records. Appropriate generic licensing as opposed to a proprietary agreement with the service provider may open up other shared service opportunities.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Case for not doing it** - None, assuming the process is efficiently defined and managed by the external service

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

## Motivation

**Principles** - Support decision-making and service development by bringing data together

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Costs** - Part of wider cost saving initiatives regarding space and print holdings

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Services** - May also lead to more optimal inter-lending arrangements across a consortium

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Rationale for not doing it** - Loss of differentiation arising from collaborative activity

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Accurate and timely records supply will enable the shared service to become more optimal and will directly benefit the local library.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Coordination of the changes arising to holdings data in the local catalogue; (3) The shared service may use the records in a public search interface, taking traffic away from the local OPAC and duplicating arrangements with other shared services; (4) Increased visibility of collection leads to demand beyond ability to supply [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC13](#), [UC16](#), [UC17](#)].

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Development of an interlending service; (3) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC13](#), [UC16](#), [UC17](#)]; (4) Shift to outsourced cataloguing and OPAC services [see also [UC3](#), [UC4](#), [UC5](#), [UC11](#)].

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Consequences of not doing it?** - (1) Cost to sector of unnecessary

duplication of holdings; (2) Without access to local holdings records, the shared service will be less effective to the detriment of the member libraries.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This use case requires the explicit transfer of records to a third party. Whether that transfer is classed as 'use' or 'supply' will depend upon the nature of the relationship between the organizations involved. See <http://www.jisclegal.ac.uk/Projects/TransferandUseofBibliographicRecords.aspx>.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

## Practicalities

### **Data exchange formatting** -

- Model 1: A bibliographic and holdings MARC export from the LMS, based on specified criteria. Additional exports on a regular basis which represent either a full export or just changes (additions, updates and deletions) based on the original export.
- Model 2: Supply of holdings data in an alternative (to MARC) format, possibly exported from the LMS, but also from other systems such as spreadsheets, ERMS or OpenURL resolver knowledgebases. Additional exports on a regular basis representing either a full export or just changes (additions, updates and deletions) based on the original export.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Lifecycle implications** - Regular supply of updated records, either by full export or changes (additions, updates and deletions) based on the original export.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Hosting requirements** - Either the responsibility of the shared service or local hosting will be required, from which the file can be retrieved by the shared service.

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

### **Existing systems impact** - None

Part of use case: [09. Supply holdings data for Collection Management](#) | [Share your experience](#)

**Skills demands** - Subject to LMS support of export of MARC records based on specified criteria, this should fall within the capabilities of a systems librarian. If 'differential' updates required, it would either be necessary for this function to be available in the LMS, or for some basic development to be done locally to produce differential update files (additions, updates, deletions). In the latter case this would require experience beyond simply running LMS reports, although should be within the capabilities of a systems librarian or local IT staff.

Model 2 additionally requires (1) Ability to transform data between library specific format and to more generic formats. This may be achieved via a third party application or through some basic development to be done locally. This would require experience beyond simply running LMS reports, although

should be within the capabilities of a systems librarian or local IT staff. (2)  
Ability to extract data from a variety of systems. This may be achieved via a third party application or through some basic development to be done locally. This would require experience beyond simply running LMS reports, although should be within the capabilities of a systems librarian or local IT staff.

Part of use case: [09. Supply holdings data for Collection Management | Share your experience](#)

## Costs

**Setup** - The necessary export capability should already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [09. Supply holdings data for Collection Management | Share your experience](#)

**Ongoing** - The costs associated with sustaining this capability are low, but will inevitably be affected by the frequency with which data updates must be supplied.

Part of use case: [09. Supply holdings data for Collection Management | Share your experience](#)

**Cost of doing nothing** - Library staff will continue with current activities, unnecessarily devoting time and effort to the care and management of non-critical resources.

Part of use case: [09. Supply holdings data for Collection Management | Share your experience](#)

## 10. Expose holdings / availability data for Closest Copy location

Expose bibliographic data including holdings and potentially availability that can be used to provide a closest copy location service.

### Description

**Activity** - Expose bibliographic data including holdings and potentially availability that can be used to provide a closest copy location service. There may be opportunity to include availability for print on demand and download as well as the number and status of physical copies. The service may be operated by a 3rd party or by a consortium at regional or national level.

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Actors** - Libraries; 3rd party or consortium services at an appropriate level

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Data involved** - Partial bibliographic records (or full depending on service set up) with holdings and perhaps availability

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

[experience](#)

**Data flow** - Involves provision of a service (e.g. API, web service, Z39.50 / SRU / SRW server) to enable the closest copy service to report availability in terms of holdings and / or availability. Alternatively (outside the scope of this UC) involves supply of data (and therefore low level of reliability in terms of holdings and availability).

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Does this require Open Data** - Whilst not essential, if the records are supplied under an open data license, the scope for reuse both within and beyond closest copy service will be unambiguous. Look for reciprocal open data licensing before engaging with collaborative services operated by a third party.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Current Examples** - We are not aware of examples based on open data, though this approach could be adopted by any shared service.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

## Benefits

**Institution** - Efficiency of access to resources for users, who may be highly mobile, is a core selling point given evolving user demographics.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Library Service** - Efficiency of access combined with the opportunity to signpost digital or print on demand as the recommended delivery format

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Researchers** - Timeliness in terms of closest copy and alternative format is a key factor in research

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Students** - Alternative locations and formats are particularly valuable at times when reading lists create intensive demand for a limited set of resources.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Replication** - The approach adopted here for exposing data may also help with collaborative collection development ([UC9](#)) and making activity data available ([UC8](#)).

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Case for not doing it** - Real time locate services are problematic and may also generate non-local pressures on services.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

## Motivation

**Principles** - Support of the user anytime, anywhere involves exposing the range of access options (locations and formats) available – from home institution or permissible alternative library as physical copy, print on demand or download.

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Costs** - there no direct cost savings, though this is a building block towards shared collection management and user services suited to the digital information environment and to highly mobile access.

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Services** - Improved services may result from better location options identification. Open data offers the freedom to pursue those opportunities.

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Rationale for not doing it** - Given reciprocal services for digital as well as print, the major inhibitor may be in localities where one HEI is more attractive in terms of collections / services / locations than its partners.

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Although there is no guarantee of any specific outcome of releasing this data, it could facilitate the emergence of location based services enabling researchers, students and others to identify closest copy to their current location

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) A 'closest copy' service, may not be well aligned with the realities of access on the ground; (3) Increased visibility of collection leads to demand beyond local resources ability to supply

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Promotion of digital and print on demand as alternatives

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

**Consequences of not doing it?** - No direct or immediate consequences.

Part of use case: [10. Expose holdings / availability data for Closest Copy location | Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This use case requires the granting (whether

implicit or explicit) of data access and usage rights to a third party. Whether that is classed as 'use' or 'supply' will depend upon the nature of the relationship between the organizations involved. See <http://www.jisclegal.ac.uk/Projects/TransferandUseofBibliographicRecords.aspx>.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Z39.50, SRU, SRW or locally developed API

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Lifecycle implications** - Potentially significant, as local infrastructure needs to handle the overhead of every query passed along by the union catalogue.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Hosting requirements** - Potentially significant, as local infrastructure needs to handle the overhead of every query passed along by the union catalogue.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Existing systems impact** - (1) Continued support and maintenance of the local target, which must be persistently available; (2) possible development work to align with new requirements from the locate service; (3) possible challenges relating to the catalogue entries for more ambitious implementations covering digital copies.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Skills demands** - Staff concerned with maintaining the external locate service are likely to possess all the necessary skills to maintain Z39.50-style targets, where these are well defined and provided by their existing system provider. Specific use cases may require local (or vendor) development work, with cost or skill implications.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

## Costs

**Setup** - The necessary 'target' capability may already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Ongoing** - The infrastructural costs associated with sustaining this capability may be relatively low, but will inevitably be directly affected by the efficiency and popularity of the union catalogue itself.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, supplying data on a case-by-case basis without adopting

an open license or permissive contract may result in an ongoing requirement to receive, assess, and respond to requests for data from third parties.

Part of use case: [10. Expose holdings / availability data for Closest Copy location](#) | [Share your experience](#)

## 11. Share data for Collaborative Cataloguing

The development of bibliographic data through a collaborative partnership for the purpose of generating, improving and enhancing records.

### Description

**Activity** - The development of bibliographic data through a collaborative partnership for the purpose of generating, improving and enhancing records. The Use Case assumes that this is being undertaken by a structured group of library partners for the mutual improvement of their catalogues, though the resulting records will be designated as open data and therefore be available for wider use. The effort may be coordinated or by a third party entity.

Services in which the collaborators are not restricted to libraries (or other professional organizations) should be considered as instances of crowd sourcing (see [UC12](#)).

*This use case differs from [UC12](#) because it is about a closed group of cataloguers and libraries whereas [UC12](#) is about the opening up the cataloguing process itself.*

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Actors** - Libraries that wish to collaborate; perhaps a third party providing the overall service

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Data involved** - Most likely full (but possibly partial) bibliographic records

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Data flow** - Selective supply of current records and return of new / edited records.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Does this require Open Data** - Whilst not essential, if the records are supplied under an open data license, the scope for reuse both within and beyond partner catalogues will be unambiguous. Look for open data licensing before engaging with collaborative services operated by a third party.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Current Examples** - Biblios.net

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

### Benefits

**Institution** - Reduction in costs is the typical driver. There is also potential for improved use of and recognition derived from the collection.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Library Service** - Reduction in cataloguing costs is the typical driver. There is also potential for improving discovery and access, resulting in increased and improved use of the collection.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Researchers** - Depending on the emphasis, collaborative cataloguing may lead to improved discovery of specialized resources.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Students** - Depending on the emphasis, collaborative cataloguing may lead to improved discovery of specialized resources.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Replication** - Release of records for cataloguing requires different logistical considerations than more general release, though the licensing may be the same. The logistical process has features in common with [UC12](#), though crowd sourced contributions may be focused on a single local catalogue

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Case for not doing it** - Quality of local catalogue, reliance on other forms of records supply, or low volumes of new material may be considerations.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

## Motivation

**Principles** - Well-populated, high quality finding aids are highly desirable. The effort to improve them is costly and the domain knowledge is likely to be scattered. A distributed effort involving professional organizations may therefore be advantageous, especially as the metadata does not itself confer competitive advantage.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Costs** - There are significant potential savings in cataloguing time, even when weighed against the overhead of coordination and quality assurance (which may be the responsibility of a third party).

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Services** - Improved services may result from better metadata and new services may result from wider description of the collection (assuming some libraries have significant resources incompletely described, notably in special collections). Open data offers the freedom to pursue those opportunities.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Rationale for not doing it** - Issues of quality and authority need to be addressed, but should be mitigated by the nature of the collaborating community.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Collaborative cataloguing within an open data paradigm is likely to open up a range of potential economies and opportunities.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Standards agreed for catalogue records fail to meet local needs; (3) effort and resource required to coordinate across partners outweighs benefits and savings

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Collaborative cataloguing of grey resources amongst the same collaborators given the benefits of open access to the records and the content itself in digital form; (3) It may open up consideration of crowd sourced cataloguing [see [UC12](#)]; (4) Shift to outsourced cataloguing [see also [UC3](#), [UC4](#), [UC5](#), [UC9](#)]

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Consequences of not doing it?** - The sector needs ways of reducing the cost of cataloguing whilst addressing the growth in publication (i.e. of things to be catalogued). This is a major high integrity / low risk option.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - In keeping with the principles behind this act, the license should be explicit and as open and unencumbered as possible in order to facilitate genuine reuse. See the general guidance on Licensing Issues for further detail.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Such services have traditionally been based on the exchange of MARC and MARC XML records. Given open data licensing, the resulting records may be made available by the coordinating service in a wider range of developer friendly formats, including RDF.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Lifecycle implications** - The lifecycle of such efforts is potentially complex. Planning the ingestion of the collaborative outputs is especially important, including any remaining local QA.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Hosting requirements** - Hosting for editing and download will be the responsibility of the coordinating party.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Existing systems impact** - The LMS should support the logistics of this approach through MARC export and import options.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Skills demands** - Subject to the capabilities of the LMS, this will fall within the capabilities of a systems librarian.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

## Costs

**Setup** - The simplest collaboration will be achieved using MARC export and import software, which should be part of the local LMS.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Ongoing** - The resource implications of managing the operational process should be reviewed but are likely to fall within the scope of existing processes for managing catalogue records.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

**Cost of doing nothing** - No extra direct costs will be incurred by not doing it, though this may be the principal and most professionally acceptable opportunity to reduce local cataloguing costs.

Part of use case: [11. Share data for Collaborative Cataloguing](#) | [Share your experience](#)

## 12. Supply data for Crowd Sourced Cataloguing

The supply of bibliographic data to volunteers for the purpose of improving and enhancing records.

### Description

**Activity** - The supply of bibliographic data to volunteers for the purpose of improving and enhancing records; this may also involve the creation of new records. Such activity may be directed (e.g. volunteers being requested to focus on specific fields, or to add new records for a specified collection) or it may be opportunistic (i.e. volunteers invited to edit and add as and when they see fit). This Use Case assumes this is being undertaken to benefit the initiating catalogue(s), though the resulting records will be designated as open data and therefore be available for wider use. It will not necessarily involve a third party coordinating organization, though there are attractions in terms of process, quality and web-scale critical mass in such services.

Services in which the collaborators are restricted to libraries (or other professional organizations) are similar in terms of open data but significantly different in other respects (see [UC11](#)).

*This use case differs from [UC11](#) because it is based on the opening up the cataloguing process itself whereas [UC11](#) is about open data benefits in a closed cataloguing collaboration.*

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Actors** - Libraries; individuals and organisations that wish to make a contribution; optionally third party coordinating services

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Data involved** - Most likely full (but possibly partial) bibliographic records

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Data flow** - Depending on the software available, the methods of version control, the activity may take place within the catalogue or outside the catalogue (both cases using a browser-based application) or it may involve the supply of records (directly to volunteers or through open access). Providing open access to the resulting 'crowd sourced' records may best be treated as a separate process, especially if there is an interim QA step.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Does this require Open Data** - If the records are supplied under an open data license, the scope for exploitation will be unambiguous and the incentive for improvement will be greater.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Current Examples** - Biblios.net, Open Library

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## Benefits

**Institution** - None other than upholding the principle of enhancing scholarship through improved discovery and description.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Library Service** - Potential for improved discovery and access, resulting in better use of the collection

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Researchers** - Improved discovery, especially in disciplines (e.g. humanities) where historic and grey materials are poorly described, if at all.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Students** - Students may be less dependent on extensive description than researchers, though they could benefit from other aspects of metadata (such as enhanced links to courses or contemporary subject keywords)

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Replication** - Release for cataloguing (whether directed or opportunistic) requires logistical considerations above and beyond more general release, though the licensing may be the same. The logistical process may however be organized as a variation of [UC11](#), though [UC11](#) is collaborative and therefore cannot take place within a single 'home' catalogue.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Case for not doing it** - The unpredictable costs of coordination and quality control may be judged to outweigh benefits, which might alternatively be accrued through collaborative cataloguing (see [UC11](#))

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## Motivation

**Principles** - Well-populated, high quality finding aids are highly desirable.

The effort to improve them is costly and the domain knowledge is likely to be scattered. A distributed and open volunteer approach may therefore be advantageous, especially as the metadata does not itself confer competitive advantage.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Costs** - There are significant potential savings in cataloguing time, though this should be weighed against the overhead of coordination and quality assurance.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Services** - Improved services may result from better metadata and new services may result from wider description of the collection (assuming some libraries have significant resources incompletely described). Open data offers the freedom to pursue those opportunities.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Rationale for not doing it** - Issues of quality and authority are not insignificant and need to be faced head on.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Unpredictably paced, variable quality records will require processing, the challenges of which can be addressed through a more directive approach to community engagement (see the community science work of Galaxy Zoo).

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Reduction in the quality and authority of catalogue records; (3) effort and resource required to make use of crowd source data outweighs benefits;

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data ; (2) Links with a broader engagement with User Generated Content linked to bib records, involving such as tagging, ratings, and reviews.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Consequences of not doing it?** - The sector needs to find some way of reducing the cost of cataloguing whilst addressing the growth in publication (i.e. of things to be catalogued). This is one option.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - In keeping with the principles behind this act, the license should be explicit and as open and unencumbered as possible in order to facilitate genuine reuse. See the general guidance on Licensing Issues for further detail

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - For editing, a web interface seems preferable. If a dataset is to be released for editing, it may be wise to release a standard set of attributes (not a full MARC record) in a format that can be handled by the user (e.g. CSV, XML). The availability of the resulting records as open data (in a range of formats) is best handled as a separate issue.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Lifecycle implications** - The lifecycle of such efforts is potentially complex. Planning of the synchronization and release of the outputs is especially important.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Hosting requirements** - The data to be edited may need hosting as a download or a separate catalogue instance. The resulting published data will need to be accessible for download.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Existing systems impact** - The LMS will not necessarily support the logistics of this approach, though MARC export and import options (for example) may be sufficiently flexible.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Skills demands** - Subject to the capabilities of the LMS, this will fall within the capabilities of a systems librarian. Depending on the approach, a cataloguing website may also be required which will need careful workflow engineering.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## Costs

**Setup** - The simplest implementation may be achieved using MARC export and import software, which should be part of the local LMS.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Ongoing** - The resource implications of managing the operational process must be addressed.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

**Cost of doing nothing** - No extra direct costs will be incurred by not doing it.

Part of use case: [12. Supply data for Crowd Sourced Cataloguing](#) | [Share your experience](#)

## 13. Supply data to be enhanced for own use

Supply copies of the library's data in return for access to enriched metadata.

### Description

**Activity** - The structured nature of library data makes it eminently suitable for automated enrichment in a variety of ways, from identifying alternative versions of a particular work (paperback, hardback, e-book, etc) to adding associated content such as book jacket images, tables of contents, and reviews. Where such enrichment is maintained by third parties, it is often easiest to supply those third parties with copies of the library's data (even if just an ISBN list) in return for access to the enrichments.

*This use case differs from [UC12](#) because it is about exploitation of catalogue data by users without a return path to the library whereas [UC12](#) is about a process intended to benefit the catalogues.*

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Actors** - Libraries, external services

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Data involved** - It depends which enrichments are being sought, but typically some subset of the bibliographic record

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Data flow** - Bibliographic data are supplied to the external service for matching and enrichment. Records containing the enhancements (or, perhaps, just links to those enhancements on a third party site) are then transferred back to the library. If it is an area of concern, libraries should ensure that they understand whether or not the external service will keep a copy of the original data.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Does this require Open Data** - There is no requirement for Open Data. Indeed, mingling of creative works (subjective reviews, book jackets), commercially licensed data (such as Table of Contents) and Open bibliographic data may have the potential to complicate downstream reuse by all parties.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Current Examples** - LibraryThing covers service

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## Benefits

**Institution** - More compelling, engaging, competitive library services

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Library Service** - (1) More compelling, engaging, competitive library services; (2) xISBN-type services may increase utilization of stock (e.g. directing those who searched for an unheld monograph to the available ebook version)

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Researchers** - Table of Contents has some value; however, it is not clear that such as reviews have anything other than cosmetic value in this context.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Students** - Table of Contents has some value; such enhancements as reviews may have greater value in this context.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Replication** - High: Third party service providers have a requirement to make the iterative process as quick, easy and painless as possible.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Case for not doing it** - Recurring cost.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## Motivation

**Principles** - Creation of more completely described and more compelling library resources

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Costs** - Cost benefits may arise subject to the service engaged, which may be free or a value added part of a broader subscription or membership arrangement

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Services** - Principally a richer and stickier OPAC

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Rationale for not doing it** - None, other than an ongoing cost for access to the enrichment data and the resources to load it

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Library systems supporting the enrichments will be more engaging, and possibly more informative.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) It will be too difficult to incorporate enrichments into existing systems; (3) Third party providers of enrichments will become scarce; (4) Third party providers of enrichments will not be sufficiently rigorous, leading to false matches; (5) Increased visibility of collection leads to demand beyond local resources ability to supply [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC16](#), [UC17](#)].

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC16](#), [UC17](#)].

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Consequences of not doing it?** - Possible decline in use arising from preference for alternative services such as Amazon or Google Book Search, which provide richer search experience and more engaging UI.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - This is likely to involve an external organization and therefore the following considerations should be actively addressed ahead of selecting the service. (1) Does the institution own the enrichments in perpetuity (i.e. What happens when it stops paying if this is part of a subscription service?); (2) Does the external provider have any continuing right to hold or use data supplied to them by the library for enrichment? (3) Where can content be used? e.g. Book jacket image use within VLE? (4) What is the impact of integrating additional data with existing records, and how does this affect the rights relating to both individual database items, and the overall database.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - This will depend on the service engaged.

- Model 1: Supply of a list of identifiers (e.g. ISSN, ISBN, OCLC Number) as simple text.
- Model 2: Supply of one or more identifiers on a 'just-in-time' basis to an API, which returns enhanced data such as book cover or ToC.
- Model 3: Supply of 'stub' (very short) records in MARC, or other format to be enhanced.
- Model 4: Supply of MARC records to third party platform, where records and additional enhancements are hosted.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Lifecycle implications** - Model 2 has no implications. However, Models 1, 3 & 4 require regular supply of updated records, either by full export or changes (additions, updates and deletions) based on the original export.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Hosting requirements** -

- Models 1 & 2: Typically very low. In many cases, book jacket images are not even hosted on institutional servers.
- Model 2: Small amount of local hosting required for 'stub' records.
- Model 3: Hosting provided by 3rd party.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Existing systems impact** - Models 3 and 4 have no significant impact. However, Model 2 is likely to require addition of HTML or Javascript to local record display. In some cases this is not possible within an LMS OPAC, although might be achieved through additional frameworks such as Juice (<http://code.google.com/p/juice-project/>).

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Skills demands** - Integration of enrichments into OPACs and other systems may be more or less challenging, depending upon the system being used. Subject to LMS support of export of identifiers or partial or full MARC records based on specified criteria, the requirements of Models 1, 3 & 4 should fall within the capabilities of a systems librarian.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## Costs

**Setup** - The necessary export capability should already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff. Access to third party data will typically involve signing a contract or license agreement, as well as either a one-off payment or commitment to an ongoing subscription.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Ongoing** - Access to third party data may involve commitment to an ongoing subscription.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, failure to innovate in this area may result in existing systems becoming increasingly dated in appearance and capability. This may lead to a decline in use within the institution, as potential users look elsewhere.

Part of use case: [13. Supply data to be enhanced for own use](#) | [Share your experience](#)

## 14. Publish data for LIS research

The publication of library catalogue data for Library & Information Systems (LIS) research purposes.

### Description

**Activity** - The publication of library catalogue data for Library & Information Systems (LIS) research purposes. Whilst the research may take place within the institution and elsewhere in the HE community, it may not be helpful to plan on that assumption. Specific research requests (both one off and recurrent) may specify data elements (e.g. MARC tags, Dublin Core attributes) and format (e.g. MARC, XML, comma delimited). This Use Case however focuses on general supply for open research use, the researcher being responsible for extraction of the required views.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Actors** - Libraries; individual researchers or organisations that wish to study the data (who may be fulfilling contracts for other entities)

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Data involved** - Full or partial bibliographic records which may be required to contain holdings data; see also [UC8](#) for transaction level research involving 'activity data'.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Data flow** - Extract from catalogue and make generally available for download or supply directly to a researcher or organization. This is a one-way process.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Does this require Open Data** - If the records are supplied under an open data license, the scope for exploitation will be unambiguous and may cover use more generally; otherwise different licensing constraints would need to be applied depending on use.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Current Examples** - The British Library offer a subset of the British National Bibliography for 'research purposes'.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## Benefits

**Institution** - None other than the principle of benefiting scholarship

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Library Service** - Potential for improving services based on the results

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Researchers** - Indirect benefit through library service improvement; LIS and related researchers will however benefit directly

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Students** - Indirect benefit through library service improvement; LIS students will however benefit directly

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Replication** - A generic standardized and open approach to the packaging, release and licensing of bibliographic data, which includes LIS research use, should be preferable in terms of time, even handedness and serving other Use Cases.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Case for not doing it** - None other than the time wasted if data is packaged, released and licensed on a case by case basis.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## Motivation

**Principles** - LIS research (increasingly linked to study of user behaviour and broader web activity) is widely accepted as beneficial to library services and to the professional community. It may be increasingly important in a globalised knowledge economy.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Costs** - Cost benefits may be derived from the research results.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Services** - New and improved services may be derived from the results.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Rationale for not doing it** - It is the nature of the library community that there is no generally accepted rationale for not sharing such data for research purposes; however, institutions will be cautious if the research is

likely to favour a particular commercial party or a disruptive agenda.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Open standardized publication would enable the library to address demand much more efficiently.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) The nature of research funding and commercial market research is that freeing the data is unlikely to generate a flood of research demands. However there might be a risk that the institution is too readily cited in research without consultation over such as context.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Research resulting from aggregated library data may be useful to inform future library strategy at a local and national level.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Consequences of not doing it?** - Responding to individual research requests is onerous.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - In keeping with the principles behind this act, the license should be explicit and as open and unencumbered as possible in order to facilitate genuine reuse. See the general guidance on [Licensing Issues](#) for further detail.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - In order to establish a standard release dataset, it may be wise to release full records, including holdings, in both MARC export and MARC XML formats.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Lifecycle implications** - Involves periodic re-releases. Annual publication would suit most research purposes.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Hosting requirements** - The published data will need to be accessible for download.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Existing systems impact** - None

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Skills demands** - This will fall within the capabilities of a systems librarian.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## Costs

**Setup** - MARC export software should be part of the local LMS.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Ongoing** - Low, subject to the regularity of refresh (e.g. Annual)

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

**Cost of doing nothing** - No extra direct costs will be incurred by not doing it. However, doing it on a case-by-case basis will generate an ongoing requirement to address requests (including pressure to customize the release) and to resolve rights issues.

Part of use case: [14. Publish data for LIS research](#) | [Share your experience](#)

## 15. Allow personal use of data for Reference Management

The supply of bibliographic data under an open license to be used by library members (and other users) in reference management software.

### Description

**Activity** - The supply of bibliographic data to be used by library members (and other users) in reference management software (e.g. using Zotero or EndNote).

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Actors** - Libraries; Suppliers of bibliographic data to libraries; Library members/users.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Data involved** - Bibliographic records.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Data flow** - Bibliographic data are made available either through standard interfaces or as downloadable files of selected records in appropriate formats.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Does this require Open Data** - Data made available by the library for these purposes needs to be open to the extent that a third-party can take, store and reuse the data.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Current Examples** - The vast majority of University and Research Library catalogues already offer this functionality (e.g. COPAC

<http://copac.ac.uk/faq/#import>) though not typically under an open license.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

## Benefits

**Institution** - Improved management of bibliographic data throughout research, teaching and learning processes.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Library Service** - Enhanced service to users, and possible benefits resulting from increased accuracy of citations in circulation within the institution (e.g. on reading lists).

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Researchers** - Time saved in managing references and creating citations and bibliographies.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Students** - Time saved in managing references and creating citations and bibliographies.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Replication** - High, as this is regarded as relatively standard functionality for the library systems used in HE and Research Libraries.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Case for not doing it** - Concern that providing records for reference management software may be in breach of agreements with those supplying bibliographic records to the library.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

## Motivation

**Principles** - Support for the academic workflow

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Costs** - There may be a cost benefit to the institution by reducing the need for researchers and students to re-key bibliographic information which offers both an immediate time saving and improved accuracy and efficiency in the general management of references and citations.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Rationale for not doing it** - Uncertainty as to the legal status of the data

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

[experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Members of the library, and other users of the library catalogue, will be able to download records into personal reference management software, and other software that can make use of structured bibliographic data.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC16](#), [UC17](#)]

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) Creation of a distributed rich network of bibliographic data; (3) Third-party tools (LibraryThing, Mendeley) get better and better, as they gain more data and more users – and as those users largely originate inside Universities, the institutions also benefit, although in ways that may be difficult to quantify [see also [UC1](#), [UC2](#)];

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Consequences of not doing it?** - Library seen as failing to supply basic service which is generally available in all HE and Research Library catalogues.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - The JISC Legal resource “Transfer and Use of Bibliographic Records” (<http://www.jisclegal.ac.uk/Projects/TransferandUseofBibliographicRecords.aspx>) differentiates between ‘Make available’ and ‘Use’. If records are provided to users who are not library members, this is seen as a ‘Make available’ activity, with associated issues outlined by the guide. Agreements with suppliers of bibliographic data to the library should be checked to ensure they allow this use, and under what restrictions. For the library associating rights and licenses with the records being downloaded by individuals, clearly any licenses should allow reuse in a wide variety of contexts, which must include some level of re-publication of the information contained in the records to allow use of the resulting references and citations in published work.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - Reference management software is generally capable of importing bibliographic data in a variety of formats, including both open and proprietary standards. Common formats for downloading records

and importing into Reference management software include MARC, RIS ([http://www.refman.com/support/risformat\\_intro.asp](http://www.refman.com/support/risformat_intro.asp)) and BiBTeX (<http://www.bibtex.org/>). Some Reference Management software packages also support searching catalogues using the Z39.50 protocol and saving records directly.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

#### **Lifecycle implications** - None

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

#### **Hosting requirements** - None

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Existing systems impact** - In the unlikely event of the existing system not supporting appropriate download formats for end users, this would need to be added. However, it may be that formats need amending to work with specific packages, or new formats may need adding to support specific packages. Again Z39.50 is widely supported in Library management systems, although some configuration may be required.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Skills demands** - Configuration of the library system to offer appropriate download and/or Z39.50 access should fall within the capabilities of a systems librarian.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

## Costs

**Setup** - If Z39.50 access is desired, there may be licensing costs associated with enabling this on the library management system, depending on expected level of use and whether Z39.50 is already enabled on the system. There may be some costs associated with staff time spent on the appropriate configuration of the library system.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Ongoing** - There may be some costs associated with staff time spent on providing support to users of the service. There may also be recurrent costs associated with providing Z39.50 access to the library catalogue.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction.

Part of use case: [15. Allow personal use of data for Reference Management](#) | [Share your experience](#)

## development

Publishing library data under an open license with the specific intention of encouraging third parties to develop applications and services using the data.

### Description

**Activity** - Bibliographic data held by a library has the potential to deliver value far beyond the OPAC and the internal systems of the library itself. As an adjunct to course websites, as a driver for reading clubs, and as a source of reference data for bloggers, readers, and genre enthusiasts, authoritative bibliographic data deserves to be used in all manner of third party applications. These might be developed by or for a community, and might be free at the point of use, or incur a fee. In all cases the existing library OPAC remains freely available to all.

*This use case differs from [UC17](#) because it is about open-ended experimental community development possibilities whereas [UC17](#) is about exploitation in a commercial development.*

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Actors** - Libraries, Application Developers

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Data involved** - Bibliographic records, possibly involving regularly refreshed holdings data or access to an API enabling live queries against holdings

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Data flow** - A dump of basic bibliographic data, supplied to the developer or more widely to a potential developer community, and ideally periodically refreshed.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Does this require Open Data** - Not necessary, but it would avoid the need for multiple developers and institutions to enter into formal contracts. Non-commercial licenses of various kinds would explicitly prevent this entrepreneurialism.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Current Examples** - University of Huddersfield, Warwick public libraries

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

### Benefits

**Institution** - Something for nothing; 'cool' attitude; encouraging innovative engagement with scholarship

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Library Service** - Something for nothing; 'cool' attitude; meeting a perceived requirement

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Researchers** - Flexibility and choice in accessing institutional services

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

### **Students** - Flexibility and choice in accessing institutional services

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

### **Replication** - High

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

### **Case for not doing it** - Combination of reputational concerns and distraction from core mission

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

## Motivation

### **Principles** - Choice, flexibility, free market, let a thousand flowers bloom.

Just because the institution provides an OPAC, it doesn't mean that all users will be most comfortable with that as their interface. Rather than devote effort to building alternative interfaces, why not expose the data and let those who are interested and motivated do it? Books need not always be central to the use case; much of the real value might actually be found in cases where bibliographic data simply offers a means of enriching or enhancing some other use.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

### **Costs** - Avoids the need for the institution to invest in alternative interfaces.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

### **Services** - By making data available in ways that users prefer, usage and satisfaction may rise.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Rationale for not doing it** - Concerns about (1) user perception of any charge for use of the resulting application; (2) quality and updating of resulting apps, which that might reflect poorly upon the institution; (3) a third party profiting from institutional data. Furthermore providing data for these purposes is simply not core to the institutional mission.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - Staff and students will have the opportunity to access an existing library service in a different way.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Backlash against a charge for accessing freely available information (from local users and external observers) [see also [UC17](#)]; (3) Damage to institutional reputation through provision of substandard product by a third party [see also [UC3](#), [UC4](#), [UC5](#), [UC17](#)]; (4) Popular product puts unsustainable strain on infrastructure (eg, by repeatedly polling holdings status inefficiently) [see also [UC17](#)]; (5) The originator of elements of the bibliographic records challenges release as open data [see also [UC1](#), [UC2](#), [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC15](#), [UC17](#)]; (6) Increased visibility of collection leads to demand beyond ability to supply [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC17](#)].

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) An ecosystem of enthusiastic developers emerges, keen and able to provide alternative means of accessing key institutional services via data dumps and APIs [see also [UC1](#), [UC2](#), [UC17](#)]; (3) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC17](#)].

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Consequences of not doing it?** - None that are significant

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - Is this Open Data? If it is, the license should be explicit and as open and unencumbered as possible in order to facilitate genuine reuse. See the general guidance on [Licensing Issues](#) for further detail. If not, what is the relationship between institution and developer? Is it a single supply of a single data set for a single purpose to a single developer, under an explicit contract? Does the institution want some share of revenue? How does that affect licenses and contracts?

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - All models require engagement with likely third party developers to decide most appropriate record formats. Third party software developers are less likely to be familiar with MARC format, and may prefer MARC-XML or simpler representations. It is highly likely that at the least 'availability' data would be provided by API for which reference should be made to (1) good practice at <http://blogs.ukoln.ac.uk/good-apis-jisc/2009/04/15/good-practice-for-apis/>; (2) OpenSearch, DLF-ILS and DAIA specifications.

- Model 1: Records exported from the LMS based on specified criteria transformed into one or more formats to make data as accessible to the interested parties. Additional exports on a regular basis representing either a full export or just changes (additions, updates and deletions) based on the original export.
- Model 2: Provision of an appropriate API.
- Model 3: A combination of data export and API.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Lifecycle implications** -

- Models 1 & 3: Regular supply of updated records, either by full export or changes (additions, updates and deletions) based on the original export.
- Models 2 & 3: Continued running of API.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Hosting requirements** - Depending on decisions regarding data exchange methods and formatting, either hosting for data files or an appropriate API

platform is likely to be required.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Existing systems impact** - There is potential impact upon existing systems if APIs are queried regularly.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Skills demands** - (1) If data exchange is done solely via download of an initial data and periodic updates, subject to LMS support of conditional MARC export, this should fall within the capabilities of a systems librarian. (2) For provision of data via API, the skills required will depend on LMS (or other) support for appropriate APIs. Where APIs do not exist software development would be required. (3) There may also be third party skills issues involving requirement to transform data to generic formats and to support the developer in understanding library data and systems.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

## Costs

**Setup** - The necessary export capability should already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Ongoing** - The costs associated with sustaining this capability are low, but will inevitably be affected by the frequency with which data updates must be supplied.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, failure to innovate in this area may result in existing systems becoming increasingly dated in appearance and capability. This may lead to a decline in use within the institution, as potential users look elsewhere.

Part of use case: [16. Publish data for lightweight application development](#) | [Share your experience](#)

## 17. Allow commercial use of data in mobile application

An application developer might use bibliographic data from an institution to create an iPhone application to provide an alternative means of accessing the catalogue.

### Description

**Activity** - With the rise of App Stores in the mobile phone market, opportunities are created for the provision of cheap applications that leverage institutional data. Given this setting, an application developer

(perhaps a student) might use bibliographic data to create an iPhone application to provide an alternative means of accessing the catalogue that some users might prefer. The application costs 79p. There is no requirement that students buy an iPhone or the app, and the existing OPAC remains freely available to all. Alternatively, a library may contract with a developer for something specific but elect to make the data open in order to encourage other developments.

*This use case differs from [UC16](#) because it is about commercial development approved by the library whereas [UC16](#) is about open-ended community development.*

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Actors** - Libraries, Application Developer

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Data involved** - Bibliographic records, possibly involving regularly refreshed holdings data or access to an API enabling live queries against holdings

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Data flow** - A dump of basic bibliographic data, supplied to the developer, periodically refreshed

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Does this require Open Data** - Not necessary, but it would avoid the need for multiple developers and institutions to enter into formal contracts. Non-commercial licenses of various kinds would be undesirable, preventing this entrepreneurialism. A completely open license keeps the opportunity open for others.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Current Examples** - We are unaware of examples involving open licenses.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

## Benefits

**Institution** - Something for negligible cost.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Library Service** - Meeting a perceived requirement in a 'cool' way at negligible cost.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Researchers** - Flexibility and choice in accessing institutional services

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Students** - Flexibility and choice in accessing institutional services

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Replication** - High: data liberated for this purpose should be re-usable by other interface developers

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Case for not doing it** - Concerns about (1) user perception of the charge; (2) quality of any apps and how that might reflect upon the institution; (3) third party profiting from institutional data

## Motivation

**Principles** - Choice, flexibility, free market, let a thousand flowers bloom. Just because the institution provides an OPAC does not mean all users will be most comfortable with that interface. Rather than devote effort to building alternative interfaces, why not expose as open data and let those who are interested and motivated do it?

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Costs** - Mobile is just one example; more generally this may reduce the need for the institution to invest in alternative interfaces.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Services** - By making data available in ways that users prefer, both usage and satisfaction may rise.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Rationale for not doing it** - Concerns about (1) user perception of the charge; (2) quality and updating of any apps and how that might reflect upon the institution; (3) third party profiting from institutional data

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

## Consequences of doing it as Open Data

**What will happen?** - (1) Staff and students will have the opportunity to access an existing library service in a different way; (2) Additional discovery channels will add value to the user experience and may increase demand on some areas of the local collection, whilst displacing demand from other areas.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Potential Risks** - (1) Loss of control over institutional data; (2) Backlash against a charge for accessing freely available information (from local users and external observers) [see also [UC16](#)]; (3) Damage to institutional reputation through provision of substandard product by a third party [see also [UC3](#), [UC4](#), [UC5](#), [UC16](#)]; (4) Popular product puts unsustainable strain on infrastructure (e.g. by repeatedly polling holdings status inefficiently) [see also [UC16](#)]; (5) The originator of elements of the bibliographic records challenges commercial exploitation of data [see also [UC1](#), [UC2](#), [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC15](#), [UC16](#)]; (6) Increased visibility of collection leads to demand beyond ability to supply [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#)].

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Potential Opportunities** - (1) Development of innovative / compelling third party services based on open data; (2) An ecosystem of enthusiastic developers emerges, keen and able to provide alternative means of accessing key institutional services via data dumps and APIs [see also [UC1](#), [UC2](#), [UC16](#)]; (3) Increased use of library collection by internal and external users through improved discovery services [see also [UC3](#), [UC4](#), [UC5](#), [UC6](#), [UC7](#), [UC9](#), [UC13](#), [UC16](#)].

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Consequences of not doing it?** - Inability to provide appropriate services on a wide range of platforms results in sections of the member population relying on those platforms disengage from the library service.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

## Rights and Licensing Issues

**Rights and licensing issues** - It is assumed that although the use case is allowing the commercial use of data, this is based on release of Open data. Data released must allow the intended reuse, which means that non-commercial licensing is not appropriate. It may be appropriate to include elements such as 'attribution', although elements such as 'share alike' may prove more challenging for commercial partners. As data is being released as 'open' data (i.e. freely) there is a question of what is being charged for, and whether this is allowed by the license applied to the data. This implies that a commercial model would have to be based around services and software, not the data itself. See the general guidance on [Licensing Issues](#) for more.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

## Practicalities

**Data exchange formatting** - All models require engagement with the target commercial partners to decide most appropriate record format. Third party software developers are less likely to be familiar with MARC format, and may prefer MARC-XML or simpler representations. It is highly likely that at the least 'availability' data would be provided by API for which reference should be made to (1) good practice at <http://blogs.ukoln.ac.uk/good-apis-jisc/2009/04/15/good-practice-for-apis/>; (2) OpenSearch, DLF-ILS and DAIA specifications.

- Model 1: Records exported from the LMS based on specified criteria transformed into one or more formats to make data as accessible to the interested parties. Additional exports on a regular basis representing either a full export or just changes (additions, updates and deletions) based on the original export.
- Model 2: Provision of an appropriate API.
- Model 3: A combination of data export and API.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

### **Lifecycle implications** -

- Models 1 & 3: Regular supply of updated records, either by full export or changes (additions, updates and deletions) based on the original export.
- Models 2 & 3: Continued running of API.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Hosting requirements** - Depending on decisions regarding data exchange methods and formatting, either hosting for data files or an appropriate API platform is likely to be required.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Existing systems impact** - There is potential impact upon existing systems

if APIs are queried regularly.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Skills demands** - (1) If data exchange is done solely via download of an initial data and periodic updates, subject to LMS support of conditional MARC export, this should fall within the capabilities of a systems librarian. (2) For provision of data via API, the skills required with depend on LMS (or other) support for appropriate APIs. Where APIs do not exist software development would be required. (3) There may also be third party skills issues involving requirement to transform data to generic formats and to support the developer in understanding library data and systems.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

## Costs

**Setup** - The necessary export capability should already be included within the LMS or equivalent local systems. Configuration to meet specific requirements may require modest effort that will normally be within the abilities of systems staff.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Ongoing** - The costs associated with sustaining this capability are low, but will inevitably be affected by the frequency with which data updates must be supplied.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)

**Cost of doing nothing** - No additional costs will be directly accrued through inaction. However, failure to innovate in this area may result in existing systems becoming increasingly dated in appearance and capability. This may lead to a decline in use within the institution, as potential users look elsewhere.

Part of use case: [17. Allow commercial use of data in mobile application](#) | [Share your experience](#)



Open Bibliographic Data Guide



Except where otherwise noted all content in the Open Bibliographic Data Guide by JISC is licensed under a Creative Commons Attribution 3.0 Unported License.

*Guide Acknowledgements*

*'Hanging Books' photo by timtom.ch (CC-BY-NC-SA).*

*Proudly powered by WordPress.*