Shared archiving as a chance to acquire fresh money for collection development

Brigitte Kromp and Wolfgang Mayer
University of Vienna
Vienna University Library and Archive Services
Vienna, Austria

Meeting: 113 — Developing collections in hard financial times: proactive collaboration, balancing e-resources vs. print, low-cost options and alternative resources, fee resources... — Acquisition and Collection Development Section

Abstract:

Due to a new university law all Austrian universities became autonomous entities concerning financial and administrative affairs in 2002. As a result, university libraries found themselves in the new position of having to compete with all other university departments for budgetary resources.

After overviewing various earlier strategies pursued to deal with this situation the paper focuses on a detailed delineation of the project of shared archiving in Austria: Print volumes which are electronically available will be archived only once. This does not necessarily mean cumulation at one institution, but to identify institutions owning the best holdings and selecting them as archiving libraries. A system of shared archiving should lead to equal distribution of burden.

This paper describes principles of legal agreements, workflows, critical success parameters and the expected positive impacts on collection development of shared archiving.

Starting Point

Financing for infrastructure and research at Austrian universities is largely provided by state institutions and funds. There are 22 public universities which take care of approximately 284,000 students, 22 universities of applied sciences with 37,500 students and 13 private universities with 6,000 students compared to a total population of 8.4 million.¹

¹ Official website of the Federal Ministry of Science and Research (http://bmwf.gv.at/startseite/hochschulen/universitaeten/)
Adoption of the Universities Act in 2002 meant that all Austrian universities were as of then autonomous bodies regarding their financial and administrative affairs.\(^2\) One of the consequences of this autonomy was that ministries no longer made available any central funds for university libraries. Libraries were thus required to approach the university directorates for all their budget requests. They were now directly involved in the competition for resources among all university institutions. It should also be noted that scientific libraries in Austria do not have a tradition of acquiring third-party funding which consequently has little bearing on their budget situation as a whole.

These national conditions along with a worldwide price increase of scientific journals (especially for STM)\(^3\) have made clear that university libraries, aside from restructuring internally, must take joint action if scientists are to continue receiving the same competitive literature as before.

**Strategies to Date**

In a first step 14 university libraries, on July 1, 2005, established an Austrian consortium for the joint acquisition of electronic media. This "Kooperation E-Medien Österreich" (cooperation for e-media in Austria) has since expanded to include 52 participants, 17 of which university libraries.\(^4\) Being structured as a consortium/syndicate meant that the cooperation was able to gain greater market power and professionalize joint acquisition of literature, thereby reducing its costs without suffering loss of quality of the scientific information supplied.

Seeing as many consortia agreements for electronic journals to begin with were based on the print subscriptions of participating libraries the publishers packages they referred to consisted of substantial printed material.

The next step was to assess the effects a general switch from conventional subscription and licence acquisition to the pay-per-view model (PPV) would have. This revealed that even with only 50% of downloads assumed as relevant the costs per location would increase to a multiple of those in the current subscription system. PPV purchasing of magazine articles makes sense only where publications are required too infrequently for a subscription to pay off.\(^5\)

---


\(^3\) Bosch et al. (2011)

\(^4\) Official website of Kooperation E-Medien Österreich ([https://www.konsortien.at/ssl/](https://www.konsortien.at/ssl/))

\(^5\) report of the Pay-per-View working group (2009)
### Scenario 1: costs per download for 100% of downloads

<table>
<thead>
<tr>
<th>Location</th>
<th>Downloads 2008</th>
<th>Costs with subscriptions &amp; licenses</th>
<th>Scenario 1: costs per download for 100% of downloads</th>
<th>Costs per article with PPV</th>
<th>Total costs with PPV for 50% of downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International large publisher</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-range university (&gt;80,000 UM*)</td>
<td>321,177</td>
<td>€ 871,304</td>
<td>€ 2.71</td>
<td>€ 25</td>
<td>€ 4,014,713</td>
</tr>
<tr>
<td>University of applied sciences (&lt;20,000 UM)</td>
<td>306,708</td>
<td>€ 478,183</td>
<td>€ 1.56</td>
<td>€ 25</td>
<td>€ 3,833,850</td>
</tr>
<tr>
<td>University of applied sciences (&gt;20,000 UM)</td>
<td>65,923</td>
<td>€ 100,945</td>
<td>€ 1.53</td>
<td>€ 25</td>
<td>€ 824,038</td>
</tr>
<tr>
<td><strong>STM Society Publisher</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-range university (&gt;80,000 UM)</td>
<td>50,940</td>
<td>€ 23,527</td>
<td>€ 0.46</td>
<td>€ 25</td>
<td>€ 636,750</td>
</tr>
<tr>
<td>Full-range university (&lt;20,000 UM)</td>
<td>6,726</td>
<td>€ 27,580</td>
<td>€ 4.10</td>
<td>€ 25</td>
<td>€ 84,075</td>
</tr>
<tr>
<td>Full-range university (&lt;30,000 UM)</td>
<td>15,915</td>
<td>€ 32,537</td>
<td>€ 2.04</td>
<td>€ 25</td>
<td>€ 198,938</td>
</tr>
</tbody>
</table>

* UM = university members (employees and students)

Table 1: costs for subscriptions and licences compared to PPV. Prices (inclusive of Austrian VAT) and download figures refer to 2008.

Bearing in mind that optimising the purchase models would not achieve any substantial further reductions in acquisition costs steps were taken to economize location and administrative expenses so as to restructure the budget for future collection development.

Two strategies are currently pursued to implement the above approach:
1. switching to e-only acquisition of publishing offers throughout Austria where this makes sense. A first acquisition model is being prepared in partnership with Elsevier BV.⁶
2. setting shared archiving measures at university libraries throughout Austria for print editions already acquired.

**Shared Archiving throughout Austria**

Given the above framework conditions in 2010 two similar initiatives were launched independently of each other: the forum of heads of university libraries in Austria (ubifo) installed the focus group “national archiving concept“ for the purpose of drawing up a

⁶ Bauer (2011)
relevant theoretical concept. The Vienna University Library simultaneously started a project to reduce the number of duplicates stored at the library’s approximately 50 locations. The two projects were subsequently brought together to concentrate competences and avoid parallel activities.

The two groups for the purpose of the joint project agreed on the following definition of “shared archiving”: for print versions of electronically available journals only one copy at a time will be kept throughout Austria, duplicates may be weeded. The intention is to identify “best holdings” and to allocate these to selected archiving libraries.

“Best holding” as such was not defined but a catalogue of criteria was provided to determine the term: maximum completeness, good state of preservation, ready availability of print copies. “Best holding” in its simplest form may refer to the holding of a single institution or it may be produced by bringing together previously incomplete collections. According to the principle of shared archiving it is also possible for the “best holding” to remain spread across several locations. Once libraries dispense with their holdings, however, they also transfer ownership of these.

This joint approach is to spread the burdens more evenly. The archiving library undertakes to adhere to the agreed standards, such as prompt document delivery or correct long-term archiving. Its partners are able to reduce the number of items and thus cut back on costs for storage and administration.

To put these ideas into practice the organisation team at ubifo established two working groups: the working group “contract design” was instructed to prepare a contract for participating universities to set the legal framework required for cooperation while leaving sufficient scope for implementation at the operational level to take future ideas and plans in its stride. The working group “workflow” is to determine a standardized procedure and template for further projects based on a typical journal package.

**Contract Design for Shared Archiving**

There is to be a framework contract which along with the usual constituent parts also governs the rights and duties of the archiving libraries and which is to be signed by as many universities as possible. Additional amendments for each archived product (individual publishers, collections, etc.) will be signed by those libraries only which are interested in the shared archiving of these journals.

It is up to the university rectorates to sign the framework contract while operational implementation and signing of the amendments is within the competence of library directorates.

The working group identified the following relevant topics in an effort to convince as many institutions as possible to participate and to avoid disadvantages for users:
Complete and regularly updated documentation in a central catalogue: the archiving library shall mark its archive holdings as such in the Austrian Union Catalogue to make obligations arising from the contract (e.g. document delivery) transparent to the public.

Delivering articles to participating libraries upon request: clear guidelines were defined for mutual supply of documents although with electronic availability such supply should be the exception rather than the rule. A service standard was agreed upon whereby each article requested shall be delivered electronically by the archiving library within 24 hours. The question remains as to whether electronic supply of documents should be the privilege of those partners who have signed the product agreement or whether it should be enjoyed by all institutions participating in the framework contract. It is also not clear yet how the costs incurred will be covered.

Permanent archiving and proper storage: every archiving library undertakes to carry out all reasonable measures for the preservation of the printed holdings assigned to it. This also means that these holdings shall be kept as non-lending holdings.

Informing partners in the event of liquidation of holdings: to avoid obligations that would make it impossible for universities to participate in the contract stipulations were adopted to regulate liquidations of holdings. Archiving libraries wishing to dispense the holdings assigned to them shall inform all libraries participating in the product agreement of their intentions in good time. This enables the other partners to declare an interest in such holdings and take relevant steps for redistribution.

No obligation in the event of force majeure: archiving libraries are not obligated to replace any print holdings damaged in the course of force majeure.

Pragmatic and prompt consent was of the essence which is why some issues, such as definition of due diligence, were not elaborated on in the contract. Individual circumstances of libraries at Austrian universities as described above made it difficult to introduce relevant standardizations. Emphasis was placed on producing a contract that would allow for maximum flexibility in implementing the goals envisaged and recruiting new participants.

Workflow for Shared Archiving

The task of this working group was to prepare and test a standardized workflow that could also be adapted to future projects. The pilot project chosen for this endeavour was the American Chemical Society (ACS) journal package.

The following criteria were relevant for this decision:

- A manageable number of titles with complex title histories
- Electronic availability of all journals reaching well back in time
- Small number of participating partners due to specialist orientation (twelve university libraries with relevant holdings)
- Common interest because of consortium acquisition
Several steps were performed in the course:

To begin with the Vienna University Library prepared a complete list of ACS journals inclusive of historical title changes. These data were retrieved directly from the ACS website (as of October 2010)\(^7\), bibliographic data were enriched by matching them with the journal database ZDB at the German National Library\(^8\). ZDB, the largest journal reference worldwide, is compatible in its data structure with Austrian online catalogues.

To trace all current holdings at Austrian libraries search requests were formulated in the Austrian Union Catalogue on the basis of these enriched title lists. This data harvesting was performed by the system librarians at the Österreichischer Bibliothekenverbund und Service GmbH (OBVSG)\(^9\) as the operator of the Austrian Union Catalogue.

Seeing as the raw data identified in the process dispose of highly complex structures it was necessary to reduce and translate them into a human readable form. Efforts were undertaken to establish what kind of information to collect so as to define a best holding for each journal.

The template below was distributed among the partners for further processing:
“Field label (ALEPH)” refers to data fields while “entry” lists the information relevant in each case. “Data source” indicates whether data have been exported from the Austrian Union Catalogue, entered by central editing and corrected locally as needed, or whether they have been filled in following assessment of the holdings actually available on site.

---

\(^7\) ACS Publications (http://pubs.acs.org/action/showPublications?display=journals)

\(^8\) journals data base (ZDB; http://dispatch.opac.ddb.de/DB=1.1/SRT=YOP)

\(^9\) official OBVSG website (http://www.obvsg.at/)
Table 2: list of data fields using the Journal of Physical Chemistry A data set as an example

For the 58 titles evident in the national catalogue a total of 520 different holdings were found across Austria, 387 of which at university libraries. Of these 387 university holdings 97 had to be corrected substantially following local assessment and a further 43 had to be deleted altogether because they no longer existed.

A password restricted website was installed containing the data supplies from all project partners so that participants may view updates of the data at all times. Participating libraries were able to benefit from individual results right away and avoid multiple work (adding missed journals swiftly, correcting duplicated data sets).

Using common low-threshold software products (MS Excel, HTML) allowed libraries to participate in the data exchange without additional training and expenses.

The results were collected, assessed and processed graphically to prepare proposals for the creation of fixed holdings and put them before the participating project partners.
Below is a draft schedule of the individual project steps.

<table>
<thead>
<tr>
<th>Project step</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing duplication at Vienna University Library</td>
<td>November 2009</td>
</tr>
<tr>
<td>Focus group National Archiving Concept</td>
<td>June 2010</td>
</tr>
<tr>
<td>Joining both initiatives</td>
<td>July 2010</td>
</tr>
<tr>
<td>Kick-off with project partners</td>
<td>September 2010</td>
</tr>
<tr>
<td>Preparing ACS title list, query union catalogue, converting data</td>
<td>October 2010</td>
</tr>
<tr>
<td>First meeting of working groups: preparing contract structure,</td>
<td>November 24, 2010</td>
</tr>
<tr>
<td>metadata scheme and schedule</td>
<td></td>
</tr>
<tr>
<td>Website for online data exchange and distribution of templates</td>
<td>December 2010</td>
</tr>
<tr>
<td>Regular incorporation of data supplied by project partners</td>
<td>January – March 2011</td>
</tr>
<tr>
<td>Meeting with legal expert to draft contract</td>
<td>February 3, 2011</td>
</tr>
<tr>
<td>Identifying ACS print publications not available electronically</td>
<td>March 2011</td>
</tr>
<tr>
<td>Deadline for data supplies</td>
<td>March 31, 2011</td>
</tr>
<tr>
<td>Second meeting of working groups: discussing results to date and first draft contract</td>
<td>April 14, 2011</td>
</tr>
<tr>
<td>Presentation of project results at ubifo</td>
<td>May 2011</td>
</tr>
</tbody>
</table>

Table 3: project schedule draft

**Results and Further Steps**

Concluding from the data supplied, if all duplicate holdings are dismantled a minimum 860 running meters of ACS print journals could be removed from Austrian university libraries. In terms of floor space according to DIN report 13\(^{10}\) this would be the equivalent of 116 m\(^2\). Calculating a monthly rent\(^{11}\) of 13.91 €/m\(^2\) a total 19,363.00 € annually could be saved and invested in collection development.

Those libraries which will take on the role of archiving libraries will not benefit from maximum space savings but instead will enjoy the added advantage of having their profile as collectors enhanced, of gaining in prestige and thus of having their location secured for the future.

Irrespective of whether the project of shared archiving is to be implemented catalogue and holding readouts for all ACS journals were assessed and corrected and enriched with electronic holdings (supplements, etc.) not yet accounted for.

Once the question of where the holdings identified as best holdings are to be archived has been settled project partners will have to take a binding decision regarding their participation. The framework contract and first amendment “ACS” will have to be signed upon adoption of the project as a standard programme. Universities not participating in the pilot project ACS may also sign the framework contract. The contract also provides for the option to join the project at a later date.

---

\(^{10}\) DIN-Fachbericht 13 (2009), p. 36, Table 13, serial no 2

\(^{11}\) average rent for all space rented by the University of Vienna incl. running costs 2011
Documentation of the organizing team’s workload revealed that a suitable infrastructure will have to be in place if shared archiving is to continue. Coordination work in the long run has to rely on separate resources set aside for the purpose.

Ultimately it will be crucial for the project to convince decision makers at university level to shift the rental expenses saved through shared archiving to library budgets and thus invest in collection development.

Thanks: The authors would like to thank Dr. Ulrike Kortschak from the University Library of the Medical University of Graz and Christian Authried from the Vienna University Library for their constructive and efficient cooperation in the organizing team for the project “Shared Archiving”.

References:

AG Pay-per-View der Kooperation E-Medien Österreich: Bericht der AG Pay-per-View an die Arbeitsgemeinschaft der Bibliotheksdirektor/innen (unveröffentlicht), 2009