

Building a Sustainable Future for Resource Sharing in a Changing World: Findings on international resource sharing payment methods from global surveys

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Abstract:

Libraries around the world have relied on international resource sharing networks to support the institutional mission of teaching and learning, enrich their diverse user populations, and fulfill users' needs. One of the major barriers for international resource sharing services is financial transactions. Issues on international resource sharing payment methods have repeatedly appeared in several studies over the past decade. Libraries across the globe are using different methods to pay and charge their international resource sharing borrowing and lending fees.

This paper reviews the history and challenges of the international resource sharing payment systems and shares surveys' results from the American Library Association Reference & User Services Association Sharing and Transforming Access to Resources Section International Interlibrary Loan Committee and the International Organization for Standardization (ISO) technical committee 46/subcommittee 4/Ad Hoc Group 1 (hereinafter referenced as ISO TC 46/SC 4/AHG 1) for Interlibrary Loan Financial

Transactions. The paper further discusses findings from these global surveys and makes recommendations for future development.

Keywords: Resource Sharing; Financial transactions; Interoperability standards; Workflows; International perspectives

History and Challenges of the International Resource Sharing Payment System

Libraries around the world have relied on international resource sharing networks to enhance teaching and learning, support their diverse user populations, and fulfill users' needs. One of the major barriers for international resource sharing services is financial transactions. Issues on international resource sharing payment methods have repeatedly appeared in several studies over the past decade. Libraries across the globe are using different methods to pay and charge their international resource sharing borrowing and lending fees. Prior to 1995, prepaid request forms, deposit accounts, invoices, International Reply Coupons, UNESCO Coupons, and Reciprocal agreements were the common methods that libraries used for their international Interlibrary loan payment (Gould, 1995). Each method could meet libraries' specific needs; however, resource sharing practitioners were challenged by using various payment methods to manage international resource sharing financial transactions. The disparate, time consuming, and costly payment ecosystem creates difficulties for sharing library resources across the world and discourages international resource sharing activities. For example, lending libraries can't supply the resources to borrowing libraries due to the lack of payment methods, even if they could fill the requests. When that happens, the borrowing library can't obtain the resources their user needs and the end user loses access to rare, unique resources that are sometimes the only resource of its kind in the world. Gould (1995) further argued that lending and borrowing libraries both found that it is not cost effective to amend the financial transaction for their international resource sharing activities. The fees associated with the payment (administrative costs and bank charges) are much higher than the actual value of the fees supplying libraries attempt to bill borrowing libraries. Therefore, international resource sharing has become a very expensive service. While the reciprocal agreement method shed light on removing the payment process from resource sharing workflow, however this informal free of charge agreement between two individual libraries seemed hard to implement on a global scale.

In early 1995, two new resource sharing transaction payment methods emerged. In January, the International Federation of Library Associations and Institutions (IFLA) Office for Universal Availability of Publications (UAP) rolled

out an IFLA voucher scheme program after two years of research and trial tests of the international resource sharing payment system. The program addressed one of the most challenging problems the international resource sharing community was facing, which is the financial transaction for the payment between libraries in different countries.

The IFLA voucher is a reusable color-coded laminated plastic card associated with monetary value. The green voucher, known as a full voucher, is equal to eight dollars; the red voucher, known as a half voucher, is equal to four dollars. The vouchers do not have an expiration date. They can be purchased from IFLA HQ and later from the Online Computer Library Center (OCLC) and sold back to IFLA or OCLC. The UAP Office also has recommendations on how to use vouchers. For example, the green full vouchers pay for one transaction, while the red half vouchers are available for libraries that think the supply of their materials is worth more than the full vouchers. The voucher, a kind of substitute currency, serves as an alternative payment method and can be circulated many times between borrowing and lending libraries for their resource sharing activities.

The IFLA voucher scheme was a game changer for the international resource sharing community and became very popular because of its simplicity and flexibility. By the end of 1996, 98 libraries from 19 countries joined the program, and more and more libraries started to accept the vouchers as a payment method. (Gould & Watkins, 1998).

On April 17th, 1995, OCLC, an American nonprofit library service and research cooperative organization that provides shared technology services, original research, and community programs for its membership and the library community at large launched an Interlibrary Loan Fee Management (IFM) payment method. This vendor-driven payment method simplified resource sharing financial transitions within the OCLC resource sharing network and improved workflow efficiency. For the first time, participating libraries were able to manage their resource sharing charges through OCLC monthly invoices. This method requires membership fees and is a popular resource sharing payment method in North America.

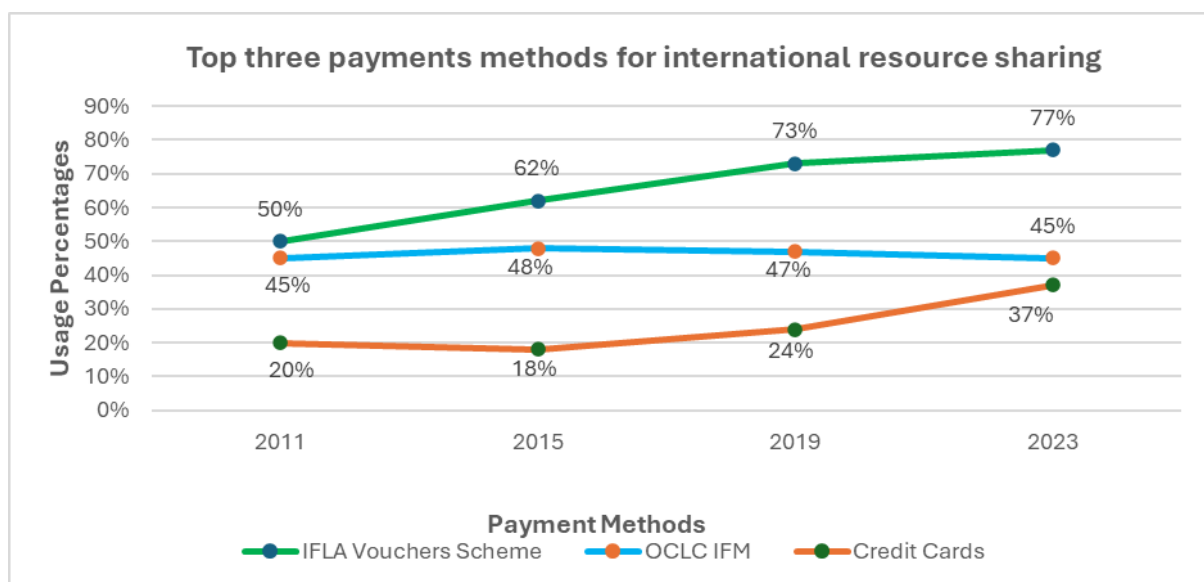
Findings on International Resource sharing payment methods from global surveys

One of the core charges of the American Library Association (ALA) Reference & User Service Association (RUSA) Sharing and Transforming Access to Resource Section (STARS) International Interlibrary Loan committee is “evaluate trends in international resource sharing practice, develop tools and provide resources for international resource sharing practitioners.” (American

Library Association 2025). In 2007, the committee conducted a survey of US libraries that focused on the challenges and issues with international interlibrary loan borrowing and lending activities. (Baich & Weltin, 2012). Building upon this foundation, the committee developed the first international survey to jump start a global conversation on this topic in 2011. Since then, the committee has conducted five surveys on international interlibrary loan services. Survey instruments include questionnaires about international resource sharing payment methods.

Results from ALA RUSA STARS International Interlibrary Loan Surveys consistently show that various payment methods are one of the major barriers for international resource sharing activities. 2015 ALA RUSA STARS International Interlibrary Loan Survey data showed that 24 percent of participants reported the difficulty of the payment system (Munson & Thompson, 2018). The surveys' data also indicated an increased trend of using IFLA vouchers, OCLC IFM payments methods, and credit cards, as Figure 1 illustrates.

Figure 1. Top three payments methods for international resource sharing (Percentage)



The usage of the IFLA Vouchers Scheme has increased by 27% in the past decade from 50% in 2011 to 77% in 2023. The data indicates the success and popularity of the IFLA voucher scheme. There is a notable trend that more and more libraries across the globe have implemented the IFLA voucher payment method into their international resource sharing workflow. This trend is growing and will continue to grow. However, one of the pitfalls of the IFLA

voucher scheme is the requirement of exchanging vouchers between libraries worldwide via mail. The laminated plastic card was designed in 1993, a time when borrowing and lending physical materials (returnables) dominated the international resource sharing business. Libraries do not need to pay shipping cost for the IFLA vouchers in most cases, as they can easily include the IFLA voucher when they return the materials to the lending libraries. However, with the growth of electronic resources, more and more libraries across the board have started to share articles and book chapters electronically. According to the most recent 2023 ALA RUSA STARS International Interlibrary Loan Survey results, the percentage of libraries borrowing only nonreturnables (articles and book chapters) internationally has nearly doubled, increasing from 10% in 2019 to 19% in 2023. As Cohen, et al., (2024) stated: “This shift likely reflects the growing availability of electronic resources and the cost-effectiveness of accessing nonreturnable materials electronically” (p.18). Obviously, it is not cost-effective for libraries to use IFLA vouchers to pay for their nonreturnable resource sharing transactions, as the shipping cost of the IFLA voucher often exceeds the value of the voucher itself. In addition, what would the resource sharing community do if the international mail service was suspended due to special circumstances, such as global health crises, natural disasters, wars, economic embargoes, etc.

Because the IFLA vouchers scheme is the most widely accepted payment method for international resource sharing financial transactions across the world, resource sharing practitioners are very interested in a new electronic format for IFLA vouchers. According to 2019 ALA RUSA STARS’s International Interlibrary Loan Survey data, 70% of participants responded that they would use electronic IFLA vouchers if they are available. Among the responses, 10% of participants are currently not using IFLA vouchers but would join the IFLA vouchers program if there was an electronic version. Interestingly, Central of South America (88%) and Australia, Oceania (82%) are the most interested in electronic vouchers, followed by North America (74%), Africa (71%), and Europe (68%). (Munson & Thomas, 2019).

The other global survey relevant to this topic was born out of the work of the International Organization for Standardization. ISO TC 46/SC 4/AHG 1 was formed following a vote of the SC 4 plenary session in May 2023 to explore one of the challenges to fully utilizing the ISO 18626 standard from an institutional practitioner perspective as it pertains to the issue of financial transactions. While libraries almost always prefer reciprocal resource sharing, and their preferred groups almost always share resources without a fee, this isn’t true

for requests that, by necessity, go outside preferred networks. This has been a consistent theme over the history of international resource sharing as this informal, free of charge, agreement between two individual libraries is challenging to implement on a global scale. In today's landscape, some mechanisms exist to ease the workflow burdens for these financial transactions, whether through vendors or other means. The challenge is to make these mechanisms interoperable in the same way that ISO 18626 facilitates interoperability between systems for sharing resources globally.

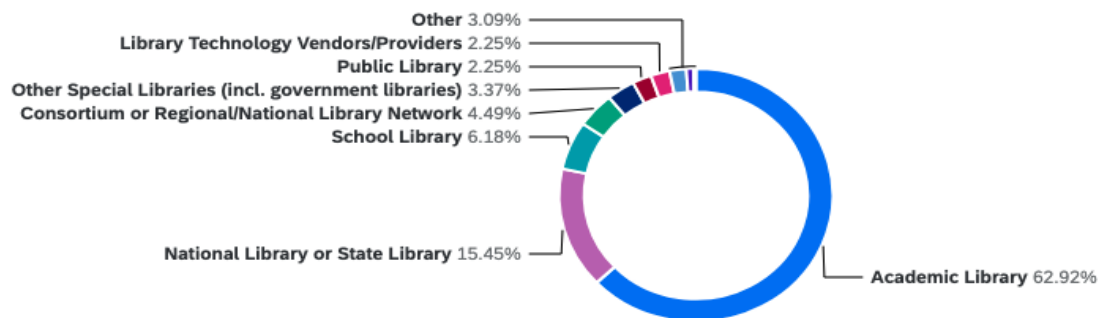
The kickoff meeting for AHG 1 was on 16 October 2023. Before kicking off the group, the convener and secretary met with Centre for Interlibrary Loan Transactions (hereinafter referenced as CILLT) in August 2023 to discuss the ad hoc group's work and its relationship with CILLT's work. From both the conversation with CILLT and the conversation in our kickoff meeting, everyone agreed that the best path forward was to focus on a global environmental scan.

Toward that end, several monthly meetings were spent drafting and refining a survey instrument to be distributed globally. The survey was built out in Brandeis University's instance of Qualtrics where we also localized the survey in several languages to garner the highest possible response rate.

In addition to refining and localizing the survey, we also discussed communication strategies for distribution. After leaving the survey open over the summer months of 2024, we are happy to share that the survey gathered more than 350 results from across the globe, representing a variety of library and vendor constituencies.

As mentioned above, there were more than 350 responses to the survey. Nearly 63% of the responses were from academic libraries; however, national libraries were also well represented along with consortia.

Figure 2. Responses to the ISO TC 46/SC 4/AHG 1 survey by library type (Percentage)



The international representation of the survey is also notable and upholds the validity of the results. 57% of the responses were from outside the United States, so our group was quite satisfied with the results.

Given this overview of the organizations that responded, let's begin to look at the critical questions that we asked of the various constituencies. Perhaps most important is the view from national libraries and consortia, as they could play a critical role in how we move toward a recommendation. Of the 29 national libraries that responded to the survey, five indicated that they already provide a central mechanism for payments and another eight indicated that they don't currently provide a central payment mechanism, but they would be open to doing so in the future. The remaining 16 libraries indicated that they would not consider implementing a central payment system. The most likely cause of this response is related to their mission and/or their organizational capacities. This leaves the landscape for national libraries fairly evenly split.

Figure 3. National Library Perspectives on a Central Payment Mechanism (Count)

View data: National Library Perspectives on a Central Payment Mechanism ×

Q8 - Do you currently provide a central payment mechanism as part of your services (e.g., you facilitate the billing of other libraries centrally instead of having individual libraries invoice and pay one another)? If not, are you open to performing this role?	Count	Number of responses
Already do this	5	5
Will consider	8	8
Will not consider at this time	16	16

< 1 of 1 >

When looking at the landscape for consortia, we observed more of a trend toward wanting to offer a centralized payment system for interlibrary loan financial transactions. Of the fifteen consortia or national associations that responded, eight responded in the affirmative that they already do provide a central service or something similar while another three indicated that they were open to the idea. The remaining four responded that they would not consider serving this function. Again, this is very likely due to capacity constraints that the organizations might be facing.

Figure 4. Consortia and Associations' Perspectives on a Central Payment Mechanism (Count)

View data: Consortia and Associations Views on a Central Payment Mechanism ×

Q10 - Do you currently provide a central payment mechanism as part of your services (e.g., you facilitate the billing of other libraries centrally instead of having individual libraries invoice and pay one another)? If not, are you open to performing this role?	Count	Number of responses
Already do this	8	8
Will consider	3	3
Will not consider at this time	4	4

< 1 of 1 >

In terms of the perspectives of individual libraries, we asked them about their preferences for how payments are made. Of the 231 libraries that responded to this question, the overwhelming preference was for IFLA vouchers followed by a check or some form of electronic payment.

Figure 5. Library Perspectives on a Central Payment Mechanism (Count)

View data: Library Preferences for Payments ×

Type of Organization	Vendor-based Payments	Count	Number of responses
National Library or State Library	Vendor-Based Payment Systems	2	2
National Library or State Library	IFLA Vouchers	8	8
National Library or State Library	Check, Credit Card, EFT	5	5
National Library or State Library	Shared Payment Systems	3	3
National Library or State Library	Reciprocal Lending	5	5
Academic Library	Vendor-Based Payment Systems	15	15
Academic Library	IFLA Vouchers	90	90
Academic Library	Check, Credit Card, EFT	27	27
Academic Library	Shared Payment Systems	24	24
Academic Library	Reciprocal Lending	20	20

Recommendations for future development

The conclusions from the ALA RUSA STARS International Interlibrary Loan surveys are consistent with the consensus from ISO TC 46/SC 4/AHG 1. The group concluded that there should be a link/url in the ISO 18626 standard describing where to pay the transaction costs or lost book fees. The payment endpoint should respond with a HATEOAS-type service description, explaining in a machine-parsable way how to interact with the endpoint. This is currently outside the scope of ISO 18626, but it is a step that can be considered in the future. The modest linking functionality could lead to an automated payment endpoint or whatever way the ILL supplying library wants to receive the payment. The endpoint could be a payment selection portal etc.; however, that is also currently out of scope for the ISO 18626 standard. Again, some of these steps can be evaluated in the future.

What can be accomplished now and what the ad-hoc group has proposed to do in the near term is to define in the ISO 18626 standard the following fields:

- Max price to pay (already defined in the standard)
- Payment transaction id
- Payment success/error redirect URL
- Payment URL
- Payment protocol name (e.g., PayPal, Square, etc.)
- The implementation of some sort of payment negotiation mechanism where the requesting library could offer valid payment channels it can support (similar to the postal service negotiation already in the standard)

As CILLT has moved forward on a recommendation to update the standard, AHG 1 recommends that close communication and collaboration with the IFLA Resource Sharing and Document Delivery section Standing Committee is

maintained as they continue to explore the future of the IFLA voucher, which currently only exists in a physical card format. Based on our conversations with them, they have been interested in our work and we have had an open and active dialog. It will be important to continue to build on that dialog and leverage their expertise as the standard continues to evolve.

Libraries' collections across the board have shifted from print materials to electronic resources. International resource sharing services have moved from sharing returnable materials to share more nonreturnable materials worldwide. As discussed previously, several studies and global surveys have identified that financial transactions in international resource sharing are one of the major barriers for sharing resources across the globe. There is a need to rethink and reform the international resource sharing payment system to ease financial transactions and reduce operating costs. The resource sharing community desires a robust payment system to boost international resource sharing activities, such as a new electronic IFLA voucher scheme, and a vendor-neutral cost-effective central payment system. The payment system should feature simplistic and flexible mechanisms that can be easily implemented at a global scale.

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American Library Association (ALA) Reference & User Service Association (RUSA) Sharing and Transforming Access to Resource Section (STARS) International Interlibrary Loan committee.

The International Organization for Standardization (ISO) ISO/TC 46/SC 4/ Ad Hoc Group 1 for Interlibrary Loan Financial Transactions.

The International Federation of Library Associations and Institutions Resource Sharing and Document Delivery Section Standing Committee

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