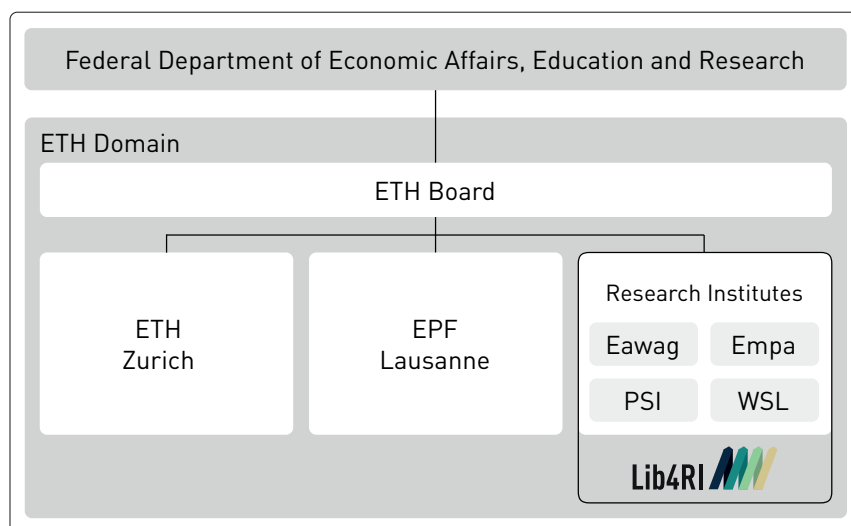# Lib4RI –
UPDATE
#12 Special Edition 2016

5 YEARS LIB4RI – EXCELLENT SERVICES FOR EXCELLENT RESEARCH

Lib4RI is the joint «Library for the Research Institutes within the ETH Domain: Eawag, Empa, PSI & WSL». As a scientific library, we provide all affiliates of the four research institutes within the ETH Domain (see diagram below) with comprehensive access to literature and technical information in printed and electronic form for research, teaching and consulting.

Lib4RI Steering Committee

Prof. Dr. Rik Eggen (Chair), Deputy Director, Eawag

Dr. Piet Spaak, Head Department Aquatic Ecology, Eawag

Dr. Urs Leemann, Directorial Board Member, Empa (until 2012: Roland Knechtle, Empa)

Prof. Dr. Manfred Heuberger, Head Laboratory of Advanced Fibers, Empa

Dr. Peter Allenspach, Directorial Board Member, PSI

Dr. Markus Furger, Scientist Gasphase and Aerosol Chemistry, PSI

Dr. Christoph Hegg, Deputy Director, WSL

Dr. Paolo Cherubini, Scientist Dendroecology, WSL (until 2014: Dr. Marco Pütz, WSL)

Dr. Lothar Nunnenmacher, Head of Lib4RI

Lib4RI –
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#12
SPECIAL EDITION 2016
5 YEARS LIB4RI – EXCELLENT SERVICES FOR EXCELLENT RESEARCH

Contents

The library team in December 2015.

5 years Lib4RI

REVIEW AND OUTLOOK

Hard to believe: it is already five years since the libraries of the four Federal Research Institutes Eawag, Empa, PSI and WSL were merged into Lib4RI. To mark our anniversary, we would like both to take a brief look back on the last few years and to establish a framework for our development over the coming years.

One trend that has accompanied us since the very beginning is the transformation from print to online media. We have stepped up our professionalisation measures in this area over the past five years. Moreover, we have considerably expanded the range of digital resources for our users and established evidence-based acquisition on a broad scale. At the same time, we have developed a functional design to ensure that the resources can be presented in a clear way – starting with the Lib4RI website, which offers various new functions and services such as the Standards Portal, the Searchbox and the Link Resolver.

The field of publishing is generally experiencing a major shift towards open access. We are therefore expecting services to play a much greater role for the library than collections over the next five years. We will supplement the established services used for finding and providing information, as well as the successful training programme, with additional services that support scientific publishing and which help increase the visibility of our scientists and our institutions. The newly launched institutional repository is only the first step in this process.

Excellent services can only be provided with close proximity to our users and by a motivated library team. The entire team has made an outstanding contribution over the past five years. We are also well-prepared for the challenges of the future, not least due to the confidence and continued support of the Lib4RI steering committee and the directors of the four research institutes in recent years.

The library team in January 2011.

Library Information and Services
FOCUS ON THE RESEARCHERS

The researchers lie at the heart of our considerations and it is our duty to make their search for information as easy as possible with our library systems and services. A key component of our services is the Lib4RI website with its Searchbox. The website also features the Link Resolver, which can be integrated into a wide range of external systems. The Searchbox and Link Resolver functions went online in 2011, shortly after the libraries were merged, and both were improved again the following year. In this age of information overload, a functional design provides our users with a clearer overview.

The Searchbox and the Link Resolver lead the user from the citation to the required literature quickly and easily. Usually, the electronic full-text can be accessed in this way. However, even where the full-text is not available directly, our users can still access it through different means. Our print collection and external collections are conveniently integrated into the Link Resolver, allowing resources and documents to be ordered or requested. We also take care to ensure that open access resources are listed as comprehensively as possible, both via the Searchbox and the Link Resolver.

The way from the Searchbox to the full text on the Lib4RI website.
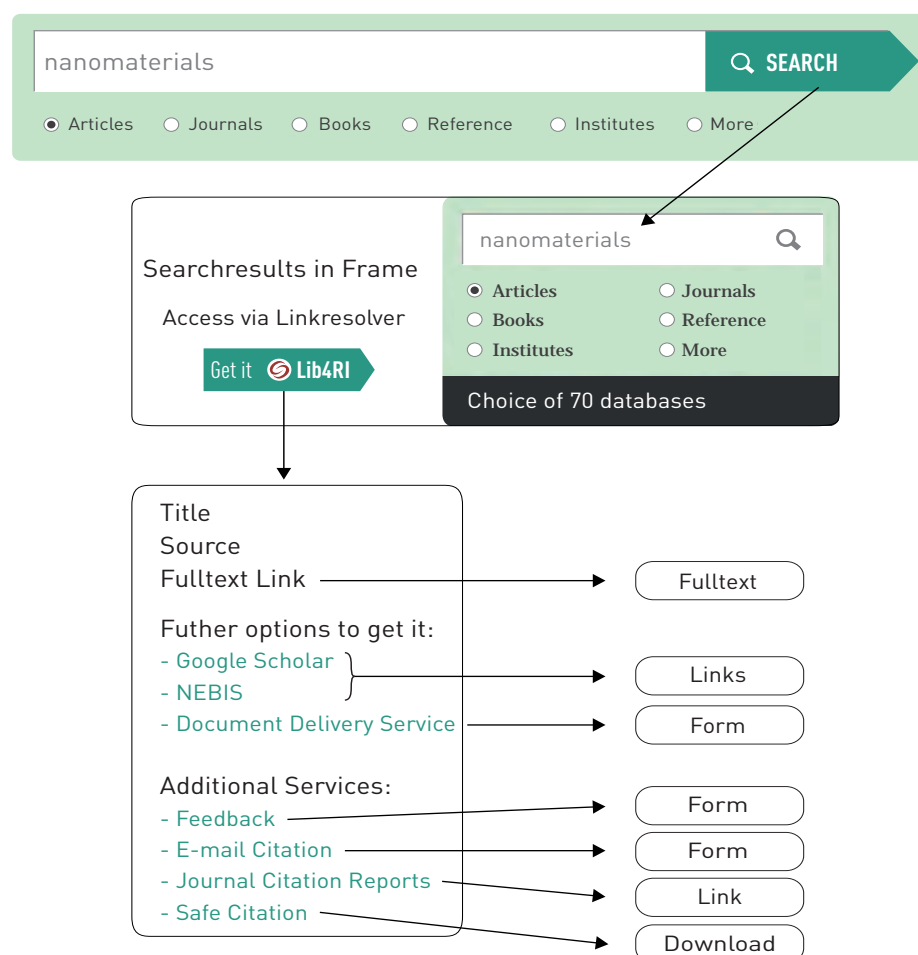
Examples of information materials produced by Lib4RI for its **users**.

Over the past five years, we have managed to close various gaps in the systems with regard to the search and provision of information. For example, we have been offering the Standards Portal since 2013, which, in addition to information on approximately 1.5 million international standards, also includes the standards acquired by the library in full-text format.

The Standards Portal has been very popular with users. In the first year alone, 45 percent of all standard orders were made via the portal. In June 2016, the new «Lib4RI e-book catalogue» was implemented, which includes more than 98 percent of the e-books purchased or licensed by us.

Classic library services such as loans of printed books or Document Delivery are still used as well. Users are very satisfied with the fast and reliable service offered by Lib-4RI. In terms of numbers, however, the importance of these services is diminishing or stagnating, while electronic resources are being accessed more frequently.

In 2013, the library introduced its own course: «Searching & Managing Scientific Information». Originally a half-day course, it has been significantly expanded since, and four half-day modules with a recommendation for one ECTS point were offered for the first time in 2015. Demand for courses is persistently high. All training courses are assessed. More than 90 percent were rated «very good» or «good» in each year, with a rising trend.

Left: Degree of satisfaction of the participants with individual aspects of the courses in fall 2015. **Right:** Training session in the Spring 2014.
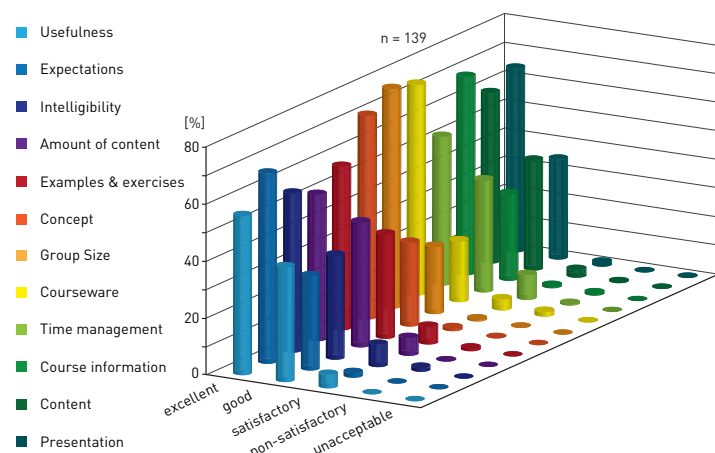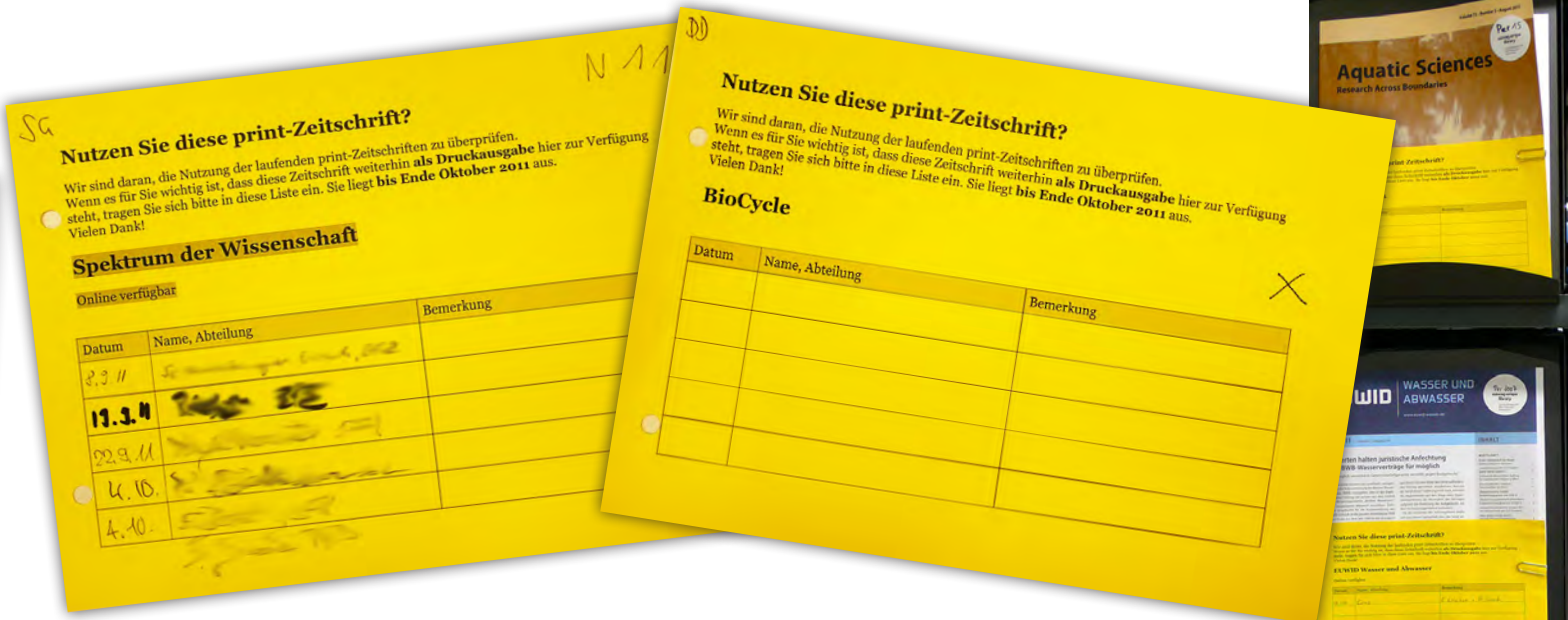
The print subscription holdings were considerably reduced based on the results of a user survey.

Range of Media Services expanded considerably

WITHIN THE SAME BUDGET

The trend away from print media towards online resources has been particularly noticeable in the areas of science and engineering. In line with demand from our users, the focus of the acquisitions has been directed towards electronic media, both as part of the merger and, to some extent, beforehand. Since then, all scientific journals are licensed only online. For the remaining printed journals (mostly journalistic content), the demand has been systematically recorded.

Even at the start of the library merger, there was a clear increase in the number of ways in which users can access electronic media. Since then, the range of e-journals and e-books has been enhanced, both qualitatively and quantitatively. This can be seen clearly in the figures for the range of electronic media and even more clearly in the usage figures, which have almost doubled within the space of five years (see Lib4RI in Figures).

One of the main achievements of Lib4RI is that it has further professionalised the acquisition and processing of electronic media. This grounded on reducing the acquisition of printed material, in favour of creating more capacity for processing electronic media comprehensively. Seamless documentation for all electronic media, as well as detailed monitoring of their usage, allow selection decisions, renewals and withdrawals to be made on the basis of statistical information.

Considerable efforts were also required in relation to disagreements with publishers, whose price increases and price expectations were sometimes well beyond the library's means. Some tough action was required in this respect, such as with the publishers

APS, IEEE and SAGE. We would like to thank our users for their patience when these resources were temporarily unavailable.

The clear increase in usage demonstrates the success of developing the collection with an evidence-based approach in the first five years of Lib4RI. The number of full-text downloads has almost doubled during this time. The exact opposite is true for printed books, for which the loan volume has almost halved – the initial figure of approximately 14'000 loans per year across all locations being already low (see Lib4RI in Figures).

The considerable increase in the number of ways to access electronic media in the first five years of Lib4RI (i.e. between 2011 and 2015) is even more remarkable considering that this was achieved within the same budget (see Lib4RI in Figures).

Publication Services

DORA, THE NEW REPOSITORY FOR THE RESEARCH INSTITUTES

The library is responsible for the bibliographies of Eawag, Empa and WSL. The bibliographies for the three research institutes are almost complete and are used for both internal and external reporting.

Already back in 2011, it was decided to modernise the technology on which the bibliography is based and to add the functionalities of an institutional repository. After an initial evaluation of the various options, a system based on Islandora/Fedora was chosen in mid-2012. It was clear that the initial effort involved in implementing this software solution would be higher than for other systems, but the range of functions and the flexibility would also be much greater.

The user interface of DORA, the Digital Object Repository of Lib4RI.
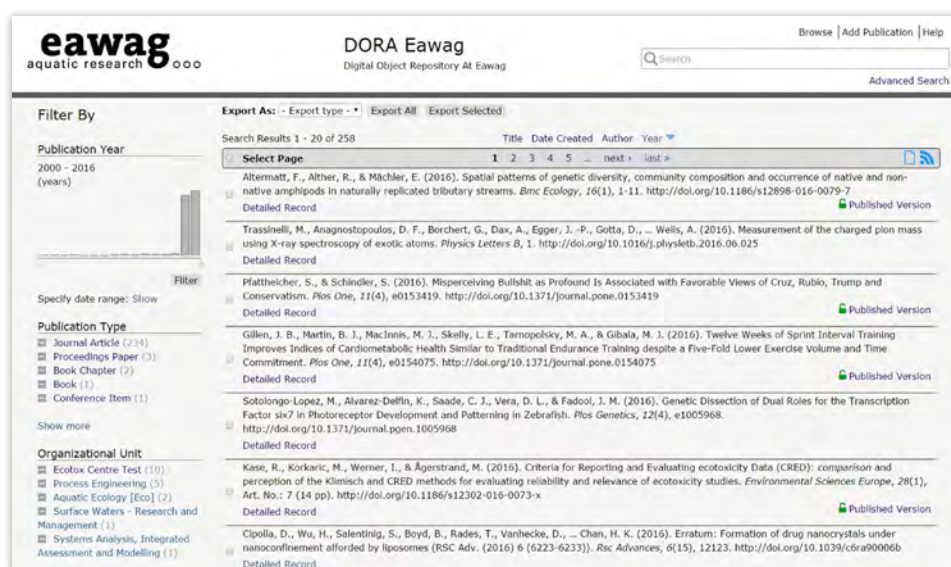
After a personnel change, efforts to develop the system were stepped up in 2014 and 2015, including the help of an external company. Since the middle of 2016, a new system has been available for the institutional bibliographies and repositories: DORA – Digital Object Repository. The system is highly consistent, thanks to the standardised data for employees, organisational units and journals. It offers numerous interfaces for importing and exporting data, and can serve as a showcase for authors and the institutes themselves. Thanks to a differentiated role and rights management, it also meets the modern-day requirements for self-archiving (open access).

In recent years, the transformation in scientific publishing has been reflected specifically in the rising importance of open access. By signing the «Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities», the research institutes have committed to the basic principles of open access. Since 2009, the library has been managing, on behalf of Eawag and Empa, a publication fund to promote open access publications. For scientists, open access often raises questions regarding exploitation rights, copyright and authors' rights. We have addressed these new developments in the field of scientific publishing in numerous personal consultations, during the Lib4RI training courses and at special informational events on open access. We also provide information on current trends in the areas of scientific publishing and open access on our website, in the newsletter and via social media.

In April 2016, all of the library's publication activities were merged into one group: «Publication Services». This move has laid solid foundations for the further expansion of the services in this field.

The Library Premises

MORE THAN JUST STORAGE AREAS FOR PRINTED PAPER

The digitisation of publishing has made considerable progress in the areas that are relevant to us. Furthermore, research results are now being published primarily in journal articles rather than in monographs. This means that the library space is being used less and less as a place to store books. Unlike the libraries at the universities, Lib4RI does not serve as a learning centre, as there are no students in the primary target group.

At the main sites of the research institutes, Lib4RI has often made premises available for other organisational units in recent years (PSI: back reading room – just before the merger; WSL: office of the library staff). At the smaller sites, the corresponding branch libraries have even been closed down and the space has been used for other purposes (Eawag: Kastanienbaum; Empa: St. Gallen; WSL: Davos – before the merger).

Premises of Lib4RI in Dübendorf (top left), Villigen (top right), Birmensdorf (bottom rigth) and **the Compactus storage unit in** Dübendorf (bottom left).

Re-utilisation measures were also taken inside the library. At Eawag, for example, a new office was installed for the library staff by reducing the area used for printed journals.

Small improvements to the layout of the library premises concerned the collection shelves for ordered media and the display of printed journals at all locations. Last but not least, extensive working capacity was made available for collection evaluation, cataloguing and sorting out – a fundamental requirement for any changes to how the premises are utilised.

Organisation and Management
FIT FOR THE FUTURE

The merger of the libraries on 01. January 2011 made it possible to establish a collaborative organisation that has proved its worth over the past five years. It has enabled the work to be further professionalised in many areas. Capacities were reallocated, in line with the shift from printed to online products in the field of publishing. In 2015/16, the library's organisation was adapted to the new challenges. The tasks involved in developing the electronic and printed collections were combined into the new Collection Development & Metadata group in December 2015. In April 2016, the InfoServices and Document Delivery groups were also merged, and the new Publication Services group was formed.

With a balanced blend of library specialists and staff with a scientific background, the library is well-equipped to tackle both current and future challenges. The team as a whole is relatively small, however, with 18 people sharing 13 full time equivalent positions at the moment. Continuous mutual support, also across the different working groups, is essential.

The individual goals that are agreed on each year in the staff appraisals are combined into larger library objectives and shown in the library's annual reports. A set of figures being collected since 2011 facilitates the reporting and enables continuous monitoring. With this paper, the library will now have a strategy for the coming years.

Documenting all processes in the library in group-specific manuals has made the work easier for all routine processes. The manuals also serve as quality-assurance tools and help new employees to learn the ropes. They also enable them to be more flexible – an essential factor in light of the thin staff cover at Lib4RI.

New services or projects can be launched in the library quickly and with low overheads. The results are universally satisfactory. Still, the library is not resting on its laurels, and continues to optimise the services it provides, as part of a continuous improvement process. This has been the case with the website, the Link Resolver and the Standards Portal, for example, but also with the organisation of the library – and it will also be the **case with the repository**.

Organisation chart of the library **Lib4RI before the merger**, in the first five years and from 2016 on.
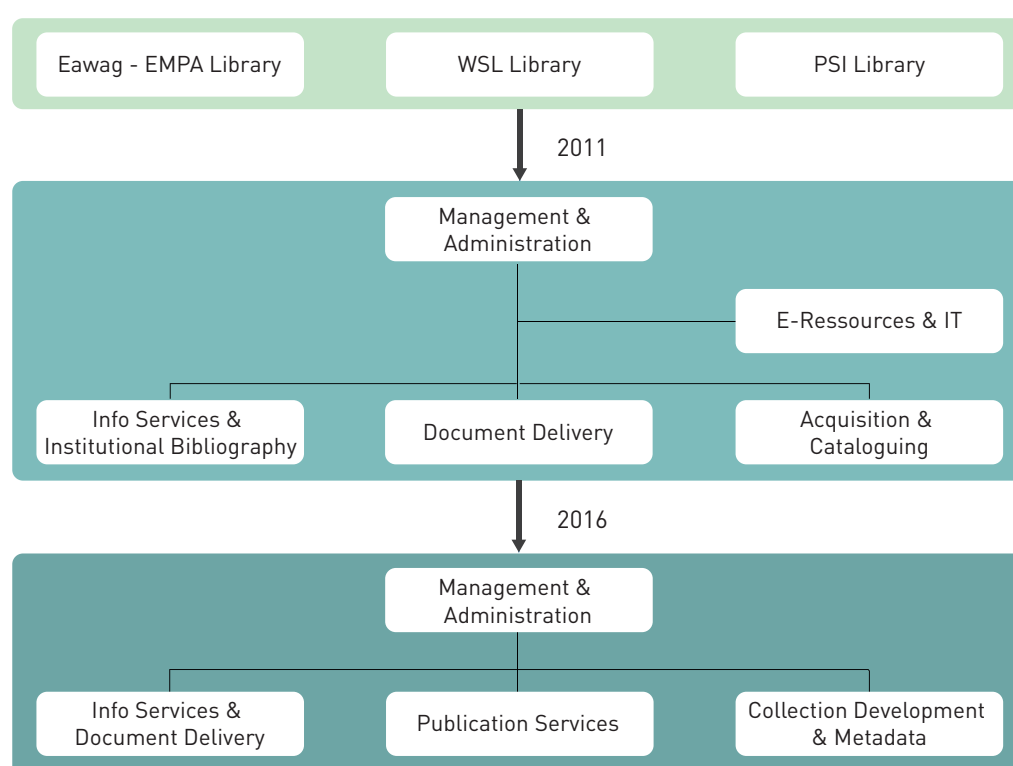
Strategy 2017 – 2020

In the first five years of the library Lib4RI, the planning has been conducted on a year-to-year basis. For the first time, we are now determining a strategy for long term development. In the next planning period, which ranges from 2017 to 2020 in the ETH Domain, further developments in the five specified fields of action are a priority for the library, so that it continues to be in a position to offer «excellent services for excellent research». The strategy and the objectives for the next planning period have been formulated by the library team in two team meetings, discussed in detail in the groups and approved by the directors of Eawag, Empa, PSI and WSL on 05. July 2016.

1. Library Information and Services – Focus on Content

We are developing the services of the library, with regard to users' requirements. In the coming years, the focus will be on improving the content of the information provided by the library, especially regarding the enhancement of content on the Lib4RI website and in the library information leaflets. We will also improve the technical systems where required. The courses, as central services of the library, will be improved and the non-location-specific services and communication channels will be enhanced.

2. Extending further the Range of Media offered – Taking Open Access into Account

A comprehensive range of media is an important basis for excellent research. We will continue to optimise the consolidated and considerably enhanced range of media in the coming years. At the same time, we will discontinue poorly used items in order to offset increases of costs. The range may have to be reduced significantly if publishers continue to impose high price increases, or if it becomes necessary due to currency fluctuations, or if government funding is cut for the four research institutes. In the medium term, the growing proportion of open access publications will lead to a shift from licensing costs to open access costs, also within the library's budget.

3. Publication Services – The new Challenge

The Lib4RI library is becoming an increasingly important contact for researchers when publishing, evaluating and increasing the visibility of their own scientific publications. We are meeting this new need of our users and continue to develop the services in the areas of scientific publishing and open access. At the centre of these efforts lies DORA – Digital Object Repository, the new system for bibliographies and the institutional repository.

4. Library Premises – Concepts for Re-Utilisation

Our users' requirements for the library's premises have changed. In close collaboration with the four research institutes, we are developing room concepts for the individual library locations in line with these new requirements. The aim is to create an excellent infrastructure for excellent research.

2017–2020 Objectives in Detail

LIBRARY INFORMATION AND SERVICES – FOCUS ON CONTENT

1.1 We will align our Services even more closely with Users' Requirements.
Having already established many high-quality services, we will apply the classical methods of user surveys and focus groups to determine the current situation. The results will serve as the basis for improving the existing services and developing new ones. At the same time, we will identify services for which the workload can be reduced, in order to create additional capacities in other areas.

1.2 We will continuously enhance the Content of Information provided by the Library.
The content on our website, in our information leaflets and, where appropriate, in new formats such as LibGuides or toolkits is intended to address the users' main questions. We will continuously update and enhance this information and from time to time evaluate how it is used. If preparing the new content requires advanced functions of the content management system, we will consider a web relaunch.

1.3 We will optimise the Courses offered by the Library.
The courses are a key component of the library's services. In addition to adding more subjects, teaching methods will also be improved. This will require a closer interaction with the participants. New formats, such as webinars and coffee lectures, will be evaluated and suitable ones will be added to the library's range. Offers for special target groups such as senior scientists or administrators, will be reviewed.

1.4 We will enhance the non-location-specific Services and Communication Channels.
Users are visiting the library less and less. This means that web-based services must increasingly replace the direct contact on site. We will therefore review our existing communication channels and adapt them where necessary, with a particular focus on the library's newsletters, as well as on webinars and tutorials.

WE WILL FURTHER IMPROVE THE RANGE OF MEDIA – AND TAKE OPEN ACCESS INTO ACCOUNT

2.1   We will continue to provide a wide Selection of online Media for our Users.
Licensed online media are available to our users directly 24/7. To ensure convenient access, we will continue to acquire a wide range of electronic journals and e-books – provided that the corresponding licences offer good value for money. Other ways to provide media, such as Document Delivery, should only be used for infrequently used media, if possible.

2.2   We will base our Acquisitions on Demand.
We will continue our strategy of evidence-based acquisition. We will consider the usage statistics when deciding on acquisitions, test new products in advance over a longer period and evaluate all existing items on a regular basis. We will acquire e-books on the basis of EBA (evidence-based acquisition) or PDA (patron-driven acquisition) models wherever possible. This will allow the library to offer an extensive collection of titles, while ensuring that it only purchases books that are actually used.

2.3   We will continue to use our Acquisition Funds efficiently in Future.
If media start to offer less value for money, or if prices increase considerably, we will respond with cancellations. To combat the financial excesses in scientific publishing, and to continue being able to offer a wide range of media in the future, we will occasionally have to ask for our users' understanding if titles need to be cancelled, even if only temporarily. We will compensate any cancelled or temporarily discontinued licences by stepping up our efforts to deliver individual articles. The range may have to be reduced significantly if publishers continue to impose high price increases, or if this becomes necessary due to currency fluctuations, or if government funding is cut for the four research institutes.

2.4   We will support new funding Models for the Publication Process.
The publication market is seeing an increase in the proportion of open access publications. We welcome and encourage this development, but also point out that the libraries must be geared towards the new models. We also believe that, in terms of total cost of ownership, subscription costs must be reduced if the proportion of open access publications increases. The first changes to the library budget have already been made (e.g., SCOAP3), and others will follow in the future.

PUBLICATION SERVICES – THE NEW CHALLENGE

3.1   We will document, present and archive the scientific Publications of the Research Institutes.
In the form of DORA, we have a powerful system at our disposal for the bibliographies of the research institutes. We will continuously evaluate the internal and external

requirements and enhance the system's range of functions. We will focus, in particular, on improving subsequent use (interfaces, user-friendly integration of publication lists in external websites, expansion of export options) as well as the evaluation of publication data (download statistics, quotations). We will improve and supplement the bibliographical metadata by comparing it to external databases.

■ **3.2 We will help Scientists make their Research Results visible and archive them permanently.**
For scientists, DORA enables the secondary publication of their manuscripts (self-archiving). This can increase the visibility of a publication considerably and it can be made available to open access. We will provide information about the new possibilities and help authors to archive their research output. At the same time, we will continue to develop DORA as a system for primary publication (e.g. of reports, working papers, etc.).

■ **3.3 We will advise Authors on Exploitation Rights, Copyright and Authors' Rights and help them make Publishing Decisions.**
The internet opens up new possibilities in the field of scientific publishing. Open access in particular is playing an increasingly important role in improving how research results are accessed, shared and subsequently used. We will accompany this transformation by extending our range of information and advice in the area of scientific publishing and open access.

■ **3.4 We will create Guidelines for Decision-Makers at the Research Institutes related to Scientific Publishing.**
By signing the «Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities», the four research institutes in the ETH Domain have made a commitment to promoting open access. The library Lib4RI supports the research institutes in establishing the necessary framework, e.g., with the DORA repository. Introducing practical guidelines on open access at the four institutions is a logical next step.

LIBRARY PREMISES – CONCEPTS FOR RE-UTILISATION

■ **4.1 We will develop Recommendations on making Library Premises more attractive for our Users.**
In the field of science, a lack of quiet workspaces tends to be the norm rather than the exception. In close collaboration with the four research institutes, the library will develop recommendations on turning library space into temporary, flexible workspaces, e.g. for PhD students and guests or as a refuge for researchers. We will also evaluate whether the library could be used as a collaboration venue. This will involve taking into account the spatial conditions at the individual locations; separating the quiet and loud areas of the library is also essential. We will develop the concepts for decision-makers at the research institutes, while also representing the interests of our users.

4.2 We will create the necessary Conditions for the new spatial Utilisation Concepts.
By withdrawing or moving parts of the collection, we will create room for new spatial utilisation concepts. In doing so, we will, of course, take into account the usage of media as well as the suitability for archiving of the latter.

ORGANISATION AND MANAGEMENT – FURTHER IMPROVEMENTS

5.1 We will organise our Processes efficiently.
The library's processes, which are already well organised, will be assessed continuously and adapted to the new requirements and technical possibilities. Where feasible, we will reduce the workload by optimising or discontinuing certain processes or services. We will check whether or not it makes sense for Lib4RI to implement further tools for process or project management, or to obtain a certification (e.g. the «Ausgezeichnete Bibliothek» qualification awarded to outstanding libraries). At the same time, we will take care to ensure that the focus remains on the work itself and that the management processes do not result in too much additional work.

5.2 We will continuously develop our Skills within the Library Team.
Library work has changed considerably in recent years, meaning that the library team needs to acquire new skills on an ongoing basis. To be able to provide excellent services, we will continue to need excellent staff working at the library. To develop the skills of our personnel, we will make use of external conferences and training courses, but internal formal and informal discussions will also be important.

5.3 We will make use of Partnerships and Networks.
Libraries are traditionally well connected. Not all systems and services have to be redeveloped locally. Instead, it is possible to benefit from synergy effects with other libraries. Often, adopting a local view of a central system makes more sense than developing the components independently. We make an active contribution to national platforms and amalgamations. This also applies to the area of acquisition, where it is essential to confront the large publishing houses with bundled demand.

**5.4 We will respond flexibly to new Requirements.**
The technical and scientific framework for scientific publishing is developing at a rapid pace. We will review users' expectations of the library on a regular basis and respond flexibly to their changing requirements. This strategy is intended to serve as a guide, but it must also be reviewed and, if necessary, realigned.

Final Provisions

The objectives of the merger were to offer an improved range of media and services and to use the budget resources more efficiently. We have without doubt achieved these aims. The range of media and the library services continue to be available to our users in improved and evolved form. The library team can therefore look back proudly on «5 years Lib4RI – excellent services for excellent research». At the same time, this success will serve as motivation for us to continue improving the library's services in the coming years and to offer our users the best possible support on all issues relating to the information procurement and publication process as a competence centre.

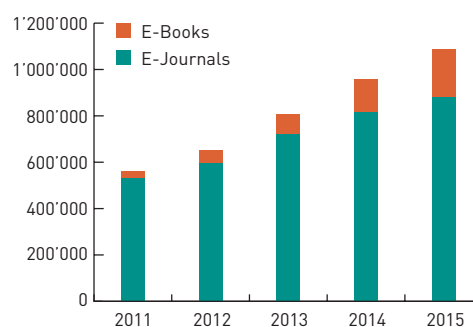# 5 Years Lib4RI in Figures

 # Books in the Lib4RI Collections

- E-Books
- Print-Books
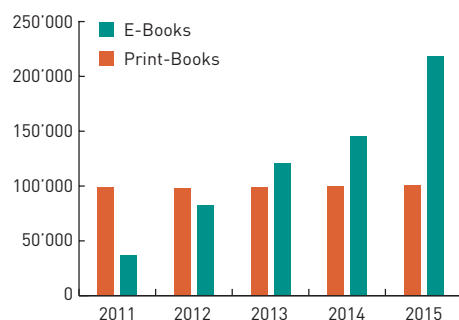
 # Licensed E-Journals in the Lib4RI Collection

 # Print Book Loans

- Lib4RI Collection
- NEBIS Network

47% 46% 50% 52% 46%
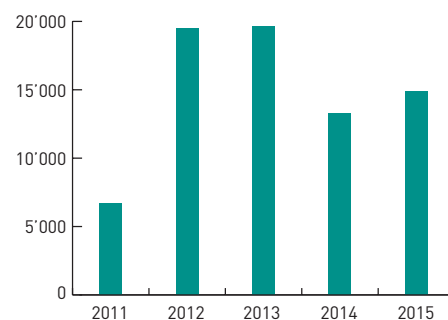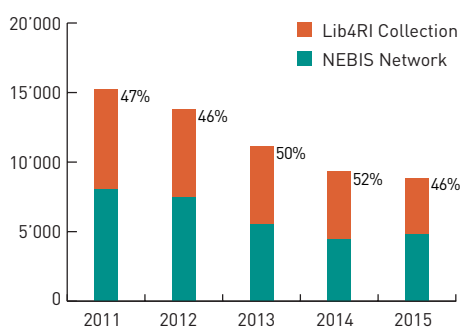
 # Fulltext-Downloads of Licensed E-Media

- E-Books
- E-Journals

 # Participants / Student Classroom Hours in Lib4RI-Trainings

- Student classroom hours
- Participants
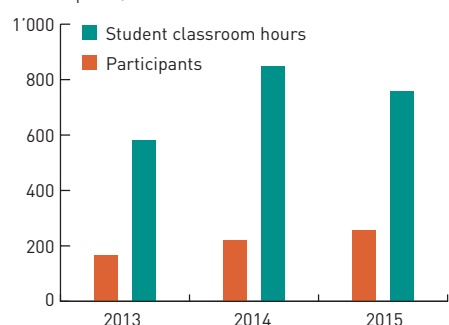
 # Documents Delivered by Lib4RI DocDel Service

 # Full Time Equivalents, Lib4RI Staff

- Projects
- Permanent Positions
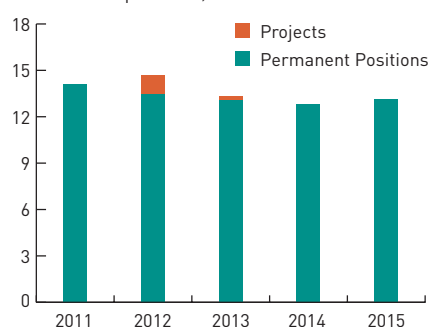
Total Expenses (CHF) of the Library
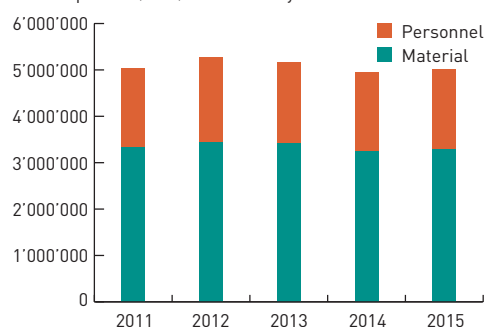
- Personnel
- Material

5 Years Lib4RI
EVENTS

For our *fifth anniversary*, we cordially invite the Lib4RI users to a **series of four** events. Alessandro Curioni, Donat Agosti and Jens Vigen, three outstanding scientists, will give talks on recent developments in scientific publishing and science itself. Furthermore, we have invited the Swiss author *Sabine Reber* for a reading from her novel «Im Garten der Wale». Here is an overview of our anniversary events:

Talk

«Cognitive Computing's Impact on Scientific Research»
Dr. Alessandro Curioni, IBM Fellow, Vice President, Europe and Director, IBM Research - Zürich
05.09.2016, 4 p.m., *Empa Dübendorf Akademie I*, Apéro afterwards
> Dr. Alessandro Curioni is one of the leading researchers in the fields of high performance computing and computational science. In his talk, he will present his ideas on how cognitive computing and big data will change science.

Talk

«Open is not open: Emerging opportunities with open research data»
Dr. Donat Agosti, Natural History Museum Bern, President of Plazi
08.09.2016, 4 p.m., *WSL Birmensdorf Englersaal*, Apéro afterwards
> Donat Agosti is an entomologist and the president of *Plazi*, **an association supporting and promoting the development of persistent and openly accessible digital taxonomic literature.**

Reading in the framework of the festival «Zürich liest»

«Im Garten der Wale» (in German)
Sabine Reber, Writer and Garden Publicist
28.10.2016, 5 p.m., *Eawag Dübendorf FC C-20*, Apéro afterwards
> Sabine Reber is probably the most well-known garden columnist and book author in Switzerland. At Eawag, she will read from her novel «Im Garten der Wale».

Talk as part of the PSI colloquium series

«Open Access in High Energy Physics»
Jens Vigen, Head of the CERN Scientific Information Service
18.11.2016, 11 a.m., *PSI West WHGA/001 Auditorium*, coffee & croissants afore
> In his talk, Jens Vigen will address possible solutions for the realisation of open access in high energy physics. One of the main topics of his talk will be the *SCOAP3* initiative, for which *CERN* is the hosting organisation.