



Národní knihovna  
České republiky  
National Library  
of the Czech Republic

# The 2021 Annual Report



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# The Introduction by the Director General

2021 will long be associated in our memories with further attacks by the Coronavirus and the subsequent anti-epidemic measures aimed at trying to reduce the impacts of multiple waves of the worldwide infection or the tireless efforts of healthcare workers, teachers, scientists and other professions aimed at reducing the impact of the crisis on each of us. Library workers, including my colleagues who worked at the National Library of the Czech Republic during the previous year, can also be boldly included among them.

Yes, the National Library also had a demanding year associated with a number of significant activities, which I would like to recall and of which I am appropriately proud. Firstly, I would like to mention the provision of exceptional access to the contents of our digital libraries under the so-called Covid regimen, which enabled a wide range of students, academicians and other scientific workers to complete their research or compile expert works. This option, built on the foundations of demanding negotiations and the willingness of the representatives of book merchants, publishing houses, copyright holders, state institutions and naturally also libraries, showed the potential of digital data and

appropriately increased the value of all our investments in the digitalisation process. The National Library of the Czech Republic put its experience to good use and was the natural leader of these activities, for which it was also recognised during the 2021 Library of the Year awards.

I am personally very pleased that our adherence to the anti-epidemic measures mean that we were able to organise two interesting exhibitions which gave the public access to a number of wonderful manuscripts not only from the collections of the National Library of the Czech Republic. This involved a fourteen-day exhibition of the *Lipnice Bible* at the beginning of September, which was followed in December by the long-prepared project entitled *The Book and the Veil*, which constituted a dignified close to the celebrations of Saint Ludmila's anniversary. Both these events were accompanied by a series of lectures, guided tours or expert publications, which expanded their cultural and social impact to include a further dimension. It is worth recalling that both of these exhibitions are still live thanks to modern technology, namely in the form of digital data or virtual exhibitions, which are accessible to everybody via the Manuscriptorium – an online library of manuscripts and early printed works, which has been providing a fully-fledged research environment since the end of 2021.

It should be quite clear from the previous two paragraphs, that a number of activities at the National Library of the Czech Republic have recently fully reflected the unequivocal trend of effectively combining

the physical and virtual worlds, which the complicated epidemic situation has significantly accelerated in the previous two years. The epidemic brought with it a series of negative impacts, but also a number of challenges which can move not only libraries, but also the entire society forward. For myself, as the Director General of the National Library of the Czech Republic, I can promise you that we will likewise endeavour to give the very best of ourselves in 2022 so that we can provide you with the appropriate support with regard to your educational, information, cultural and social needs.

*Mgr. Tomáš Foltýn*

*Director General of the National Library  
of the Czech Republic*

*Photo: Archive of the NL CR*





## The year's events

### The provision of access to the digital collections

The National Library of the Czech Republic (NL CR) has long endeavoured to keep in step with the worldwide trend of providing access to digital collections to the widest possible spectrum of readers using modern tools and with the objective of making the greatest possible amount of literature available to the maximum number of users in a form that is most user-friendly for them.

The nature of the individual collections and the differences between them, but also the different requirements with regard to their use require special tools. As such, the historical collections use the tools provided by the Manuscriptorium environment, the Slavonic Library has continued to provide access to part of its digitalised collection via Google Books and readers can access the library's modern literature collection using the Kramerius tool.

In 2021, a total of 218,986 users visited the Kramerius digital library containing the NL CR's modern collections and viewed a total of 10,563,893 pages of literary content during 1,829,048 visits. All the monitored user parameters showed growth in comparison with the previous year. This service providing access to digitalised documents is available to libraries and users free of charge.

The Kramerius system's curators provided readers and other users with permanent support in 2021 and responded to over 670 queries concerning content and content administration. The NL CR continued its promotion focused on presenting interesting documents from its digital libraries and expanding awareness of the existence of the National Digital Library's (NDL) services and of out-of-commerce works (OOCW) among the wider public on the Facebook, Twitter and Instagram social networks. The total number of followers for these three accounts reached 35 thousand in the previous year. More than 11 million users were able to be reached by means of 919 posts – more than 2 million unique users were engaged when converted to the individual accounts.

The NL CR was also actively involved in the ongoing development of the Kramerius system in 2021 as part of a multilateral development team managed by the Library of the Czech Academy of Sciences (LCAS). System safety requirements, improvements to the functions for operating statistics and new requirements for the more precise and detailed administration of access authority

to the individual works contained in the digital library were among the many matters resolved.

### The awards received by the National Library of the Czech Republic at the 2021 Library of the Year Awards

The National Library of the Czech Republic received a special award for the provision of access to its digital libraries during the Covid-19 pandemic as an irreplaceable resource for the areas of education and research during the 2021 Library of the Year awards ceremony. The award was given as part of the category of significant deeds involving the provision of public and library services. The Director General of the NL CR, Mgr. Tomáš Foltýn, was presented with the award by the Minister of Culture, Lubomír Zaorálek, at the official ceremony held in the Mirrored Chapel at the Clementinum on 14 October 2021.

The coronavirus pandemic and the associated announcement of a state of emergency in 2020 and 2021

significantly limited the library's services associated with the physical access of users to its collections. Thanks to the negotiations between the NL CR, the Dilia and OOA-S collective copyright administrators and the Association of Czech Book Merchants and Publishers, it proved possible to conclude an exceptional short-term collective agreement, which enabled the full opening up of the digital libraries containing copyrighted works that are available in the market. In total, access was provided to approximately 250,000 units of early and more recent Czech published works (books, magazines and other documents). The access was secured in the form of remote access, i.e. from the user's own computer situated at home or at work. The NDL-COVID access system incorporated 175 libraries, mainly from universities and scientific institutions. The users from these libraries were able to display and read the full texts of the offered documents without being able to create a print or digital copy. The publishers received compensation at the amount of 80 million CZK in return for the digital libraries, including the latest copyrighted books, being fully opened up. The NL CR secured the allocation of this compensation in cooperation with Dilia and the Association of Czech Book Merchants and Publishers.

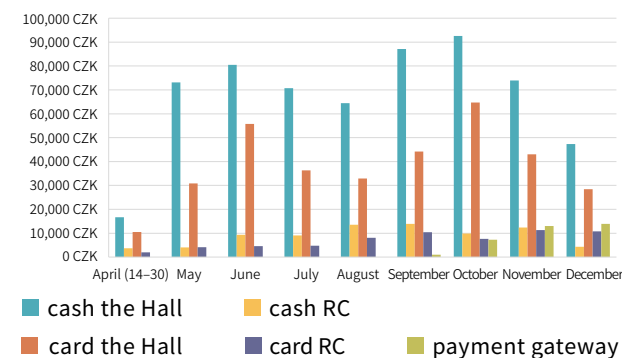
## New services

2021 saw several new features at the Reader Services Department, which should improve and simplify the acts associated with the registration processes and the absence of any loaned books. The public has been calling for some of them for some time now, while the necessity of the others became apparent during the lockdown period.

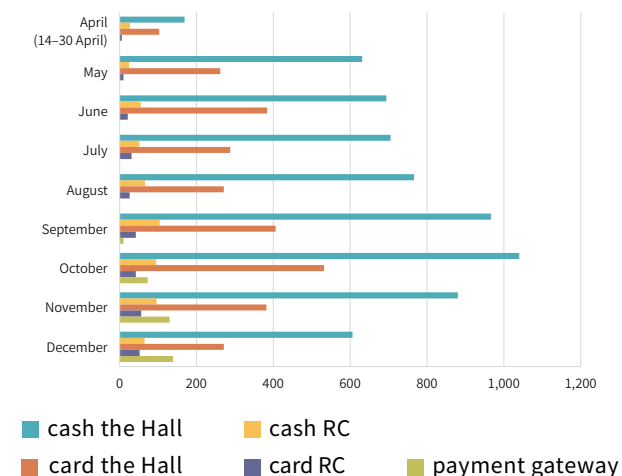
### Payment terminals

The operation of two payment terminals commenced in April 2021 in conjunction with the full restoration of operations at the Main Hall. This involved one fixed terminal and one mobile device on loan from the Communications Department for trial operations. Readers can now also find new payment terminals at the Reference Centre, the Slavonic Library and the Mirrored Chapel. The Main Hall has had its own mobile terminal, supplementing the fixed payment terminal, since August 2021 in association with the change in the banking service provider for the NL CR. In 2021, readers paid more than 36% of the total revenue volume from the Main Hall using payment cards. More than 30% of all payments have been cashless since the operation of the payment terminals at the Main Hall began, which has confirmed the fact that the decision to secure two terminals for the Main Hall was the right one.

*A comparison of the payment frequency according to the method of payment at the Main Hall (the Hall) and the Reference Centre (RC)*



*A comparison of the volume of revenues according to the method of payment at the Main Hall (the Hall) and the Reference Centre (RC)*



### **The book return box**

A book return box was installed at the foot of the Astronomical Tower in the Clementinum facility at the beginning of May 2021. It can be used to return home loans from the NL CR collection (including the Library and Information Science Library) and the Slavonic Library, including at times when these facilities are not open. It is not possible to use the book return box to return CDs, DVDs or documents on loan from other libraries on the basis of interlibrary services. The documents that are placed in the book return box are removed from the reader's account on the following business day, provided they have been placed in the book return box in the same condition, in which they were loaned out. The book return box has expanded the options for returning home loans to include those times when the Main Hall or the entire library is closed to the public. It proved itself to be of significant help somewhat early on, when the Main Hall had to be closed unexpectedly as a consequence of a cyber-attack and the book return box thus became the only way of preserving at least some of the library's physical services. The anonymity of the book return box has probably also contributed to the fact that it has led to the return of several volumes from the NL CR collection which had previously been written off as lost.

### **Remote registration**

The option of registering to use selected NL CR services without having to be physically present is one of the services that has long been missing from those offered by the NL CR. Remote registration was launched as an experimental service on 14 September 2021. Those who are interested in this type of registration receive access to electronic information sources or to works that are unavailable in the market, but can be used remotely as part of the NDL once the individual has met all the requirements (filling in the pre-registration form, paying the registration fee online or submitting a document that provides entitlement to a discount and the provision of an authenticated contract). Users with remote registration do not have access to all the services that are physically provided at the NL CR, but they have the option of supplementing their registration when visiting the NL CR and thus becoming "fully" registered users with access to further services.

The remote registration process currently requires the applicant to pay the registration fee via the online payment portal and to visit a Czech POINT in person, for example, to have their signature on the contract verified. We are sure that we will also be able to offer individuals interested in NL CR services and resources with other types of remote registration that will simplify this process in 2022.

### **Extending registration**

We also used the online payment portal environment to offer readers the option of extending their registration on the basis of an online payment in trial operations that started on 20 October 2012. This service is designated for those who have settled all their receivables owed to the library and whose registration has expired by up to a maximum of one year or is 30 days prior to expiry. Those readers who are exempt from payments due to their age or an exemption based on the Library Rules can receive this service by mail. Information about the option of online registration extension is also included in the notification that we send to all readers, whose registration ends in the given month, at the start of the month in question.

A large bonus in relation to the service involves the fact that it effectively takes place without our intervention – the entire process has been set up by the Library System Department so that the registration is automatically extended within two hours of the amount being credited to the NL CR account.

# Moving the National Library's collections into the reconstructed storage areas

The National Library of the Czech Republic completed the large-scale task of moving its library collections, workplace equipment and card catalogues, which had commenced on 17 August 2020, during the course of the month of April 2021. The extensive work of moving the modern book collections, which are currently not available to the public, from the replacement storage area located in the Artex Art Safe, s. r. o. facility in Měšice and the depositories hired at the Jenštejn facility of the Library of the Czech Academy of Sciences (LCAS) to the newly opened depositories in Hostivař took place in association with the gradual completion of the reconstruction work on the older building at the Central Depository in Hostivař. The unification of the shelfmarks, which had recently been located in various NL CR stores in the Clementinum and Hostivař, or partial relocations exclusively within the framework of the complex of NL CR buildings in Prague-Hostivař took place in parallel with the relocation of the entire collections stored in the

external depositories. The moving process concerned several million volumes from the Universal Library Collection (ULC), the collections in the Slavonic Library (SL) and the collections of the Librarianship Institute (LI). The objective was to place almost 4 million volumes in their final storage place, including the preparation of free space for additions to these shelfmarks while maintaining an optimal approach to the storage of the collections and future increased efficiency in the process of releasing the volumes to the library's users. Such a relocation of the collections is only comparable, for example, with the great move realised in the 1990's when the new NL CR depository in Hostivař was being filled or with the relocation of the National Archival Collection (NAC) to the new depository building in Hostivař which took place in 2014.

A special working group consisting of representatives of the departments responsible for the administration and protection of the collections, the administration and operations of the individual NL CR buildings and the Investment Department supervised the coordination of the moving operations as standard. The actual moving process was supervised on a daily basis by the administrators of the individual collections. The handling of the collections and the transportation of the books was performed by Stahl – stěhovací služba, s. r. o.

The lion's share of the moved collections totalling in excess of 56,000 running metres came from the shelfmarks administered as part of the ULC. The moving

process especially involved long closed shelfmarks that had been stored in crates and boxes at the external storage site in Měšice. The documents stored at yet another rented external depository situated at the LCAS facility in Jenštejn with a total of around 2000 running metres were also relocated during the course of the relocation operations. Selected shelfmarks formally stored at the Clementinum were also relocated to the reconstructed depositories, which led to the connection of shelfmarks linked both logically and by content, the preparation of part of the facilities for the next revitalisation phase at the Clementinum and the acquisition of space for part of the specially stored collections. The collections were also moved between the individual Hostivař depositories during the moving work, the objective of which was to improve the effectiveness of the collection storage, to simplify the dispatch processes in the future and to increase the capacity for additions to the NAC. Once the moving work had been completed, stock controls were undertaken in order to check the integrity and completeness of the shelfmark series. In addition to the expert employees from the Collection Administration Department (CAD), representatives of the Service Department (SD) also participated in the successful completion of the inspections as part of the replacement work during the period when the library was closed due to the Covid-19 pandemic.

An integral part of the moving process involved removing the collections of the LI and SL. The LI moved

the book collection of the Library and Information Science Library (LISL) from the facility in Měšice to the Central Depository in Hostivař. This involved the relocation of a total of 589 running metres. Once the volumes had been placed on the shelves, the collection was inspected by the LISL employees. The movement of the SL collections took place in several phases at different times. About 380 running metres of periodicals were initially relocated within the Hostivař depositories. The transfer of the collection located in Měšice commenced in March 2021. A total of more than 2350 running metres of the collection were moved. Part of the relocation process included the integration of volumes that had formerly been taken from the Clementinum into these collections for reasons of preserving their integrity.

The objective of the moving process was to once again provide access to a significant part of the NL CR collections to the library's users, which some of them had been waiting several years for. All of the NL CR collections are therefore currently accessible.

## The Lipnice Bible and the Book and the Veil exhibitions

The Lipnice Bible, a manuscript of Czech origin, which travelled to the Czech Republic from Oklahoma City in America, where it is stored, for the first time, was displayed in the Mirrored Chapel along with four exhibits from our collections from 1 to 15 September 2021 in cooperation with the Museum of the Bible in Washington DC and the Faculty of Arts at Charles University in Prague. The text accompanying the exhibition entitled *The Lipnice Bible 1421–2021: A Shield of Faith for Turbulent Times*, which tells the gripping tale of a rare mediaeval codex within the context of other contemporary Bibles dating from the turbulent period at the end of the 14<sup>th</sup> and the beginning of the 15 centuries, was compiled by a research team under the leadership of Associate Professor Lucie Doležalová from the Faculty of Arts at Charles University.

A team consisting of employees from the Manuscript and Early Printed Books Department and other experts from several scientific institutions (the Institute of History of the Czech Academy of Sciences, the Faculty of Arts and the Protestant Theological Faculty of Charles University) and led by Dr Renáta Modráková created an exhibition entitled *The Book and the Veil*

*Veil. 1100 Years since the Death of Princess and Saint Ludmila* upon the occasion of the 1100<sup>th</sup> anniversary of the martyr's death suffered by Ludmila, who was both a princess and a saint. The exhibition's objective was to present a picture of Saint Ludmila in the literary culture of the Middle Ages and the early modern age from an interdisciplinary perspective. Thematic panels and exhibits consisting of manuscripts and early printed material from the NL CR historical collections were therefore used to depict a reflection of the personality of Saint Ludmila in various genres of book production. The exhibition was installed in the Clementinum Gallery from 13 December 2021 to 30 January 2022. A short-term exhibition of the most valuable exhibits in the Mirrored Chapel was prepared for January 2022.

Virtual exhibitions of the same name were prepared for both exhibitions and published in the Manuscriptorium digital library.



*The Lipnice Bible.*  
Photo: Eva Hoříková



*The Book and the Veil*  
Photo: Romana Vardanová



# The release of the fourth version of the Manuscriptorium digital library

The first test version of the new form of the Manuscriptorium digital library was released to the public in a beta version in November 2021. Its aim is to transform the existing digital library into a fully-fledged virtual research environment. Users will not only be able to view and study the copious digitalised contents, but also to sort, enhance and therefore de facto co-create them. The first step involved launching the new catalogue enabling advanced research work with historical documents, publishing the first virtual exhibitions, videos and articles about the manuscripts and processing extensive information for the introductory interface. The new version of the Manuscriptorium will be supplemented with further functions and diverse content in the following year and the existing version of the Manuscriptorium will remain in operation throughout the period of testing and debugging the new system, so that the comfort of the end users will not be disrupted in any way. The new version of the Manuscriptorium can be found at: <https://beta.manuscriptorium.com>.



# The library's main activities

## Research and development activities and further projects

### RESEARCH AND DEVELOPMENT AT THE NATIONAL LIBRARY OF THE CZECH REPUBLIC

#### A. Institutional research: The long-term concept for developing the research organisation at the National Library of the Czech Republic in 2019–2023

*Period: 2019–2023*

*Coordinator: Adolf Knoll*

*Financial support: the Ministry of Culture  
of the Czech Republic*

*URL: <http://www.nkp.cz/o-knihovne/projekty-a-programy/nk-vyzkumna-organizace>*

The National Library of the Czech Republic (hereafter simply referred to as the NL CR) continued realising its *Long-Term Concept for Developing the Research Organisation of the National Library of the Czech Republic in 2019–2023* in its expanded, updated version which has been supplemented with three further areas, while the original areas have also been expanded.

#### **Area 1. Research into the history of book culture**

*Project leader: Kamil Boldan*

The members of the realisation team continued their work on ascertaining the original owners of the mediaeval books housed at the NL CR. They undertook research into the provenance of approximately 300 mediaeval manuscripts and 280 incunabula volumes with the complete transcription of the provenance notes and the associated prosopography of the ascertained individuals. Within the basic research, Renáta Modráková has systematically devoted herself to the area of book culture in mediaeval convents, Milada Svobodová has been involved with the history of the Lobkowitz Library, Lucie Heilandová has been researching the history of lithography and Moravian letterpress printing, Kamil Boldan has been studying the history of letterpress printing, the book trade and book binding workshops in the 15<sup>th</sup> century and Jan Vojtíšek has been involved in researching the history of cartography and urban book culture. They have published a total of three studies: *Knihvazačská dílna*

*staroměstského Mistra se supralibros Vyšehradské kapituly CW [The Book Binding Workshop of an Old Town Master and the Supralibros of the Vyšehrad CW Chapter]* (Kamil Boldan), *Mapa a popis Čech v Orteliově atlasu Theatrum Orbis Terrarum [A Map and Description of Bohemia in Ortelius' atlas Theatrum Orbis Terrarum]* (Jan Vojtíšek) and *Rukopisy středověkých klášterních knihoven jako součást knižní sbírky Františka Josefa Graph von Hraběte ze Šternberka [Manuscripts from Mediaeval Monastery Libraries contained in the Book Collection of Franz Joseph, Graf von Sternberg]* (Milada Svobodová). A monograph on Saint George's scriptorium by Renáta Modráková has also been submitted for printing in addition to a further 5 new studies. Milada Svobodová has completed a further volume in the catalogue of the manuscript collection from the Lobkowitz Library in Prague and Michal Dragoun has commenced work on a monograph on the newly discovered torso of the Prague Old Town Library dating from the 15<sup>th</sup> century.

#### **Area 2. Musicology**

*Project leader: Zuzana Petrášková*

Research on the as yet unprocessed collections at the Church of the Exultation of the Holy Cross in Litomyšl and the Church of Saint John the Baptist in Teplice continued, including the submission of records to the RISM database.

The entries in the watermark database were inspected. There are 1460 entries for use; the database is visited by collaborators from the RISM and other researchers at: <http://aleph.nkp.cz/web/watermarks/intro.htm>. Furthermore, an online catalogue of the printed sheet music from Marco Berra's publishing house (1811–1855) has also been made available at <https://aleph.nkp.cz/web/berra/cze/intro.htm>. The stored records are regularly subjected to an in-depth inspection and are corrected and supplemented. The in-depth inspection and cataloguing work on transferring the paper documentation from the collections that have already been recorded in the Union Music Catalogue to the RISM database continued, including printed works from the collections of Ludvík Hornov and P. Barnabas Weiss and the Strachota family collection from the NL CR. The thematic catalogue from the P. Barnabas Weiss collection was completed and sent to be printed as the 12<sup>th</sup> volume in the NL CR *Catalogus artis musicae in Bohemia et Moravia cultae* editorial series. The processing of the music collection of Elise Countess Schlick and Schönborn-Lobkowitz was completed in the archive of the Prague Conservatory Library. An expert study on this collection is under preparation. In-depth reviews of the records held in the music archive in Český Krumlov, including their submission to the RISM database, took place regularly. All of the stored entries are available online at <http://opac.rism.info>. The cooperation with the international RISM editorial centre focussed on online consultation, especially

dedicated to the processing of printed historical musical documents. A study on Josef Páleníček's music estate, which will be published in 2022, has been prepared in the area of research into the musical culture of the 19<sup>th</sup> and 20<sup>th</sup> centuries. The notation from the first two movements of Dvořák's B major Trio has been completed. The basic material has been prepared for a study into Otakar Ostrčil's composer manuscripts held in the NL CR Music Department's collection. A planned study of the French letters from the Music Department's correspondence collection will be published in 2022 in the *Fontes Artis Musicae* magazine.

### **Area 3. Slavonic Studies**

*Project leader: Lukáš Babka*

This area involves the expert development of disciplines in Slavonic studies and Slavonic librarianship, which are guaranteed at the NL CR by the independent Slavonic Library (hereafter simply referred to as the SL). The objective is to perform expert research into the collection of historical manuscripts and old printed documents and the cartographic and visual collections at the Slavonic Library with a focus on the provenient characteristics of the documents and the study of any phenomena discovered during the course of the research. The objectives include the high quality cataloguing of the historical documents designated for digitalisation and the transfer of the cataloguing entries from the SL database to the Manuscriptorium. The SL

further focuses on research into specific phenomena associated with the existence of the library and the composition of its collection: interwar Russian and Ukrainian emigration, the personal libraries in the SL collection and so on.

The remaining monographic titles published in 1799 and 1800 and the first 12 periodical titles were investigated and re-catalogued as part of the fulfilment of a sub-objective involving the publication of the fourth volume of the *Katalog starých ruských tisků z fondů Slovanské knihovny tištěných azbukou* [Catalogue of Old Printed Russian Documents from the Slavonic Library's Collections Printed in Cyrillic]. The catalogue entries were prepared in the form in which they will be published in parallel in the prepared volume with the re-cataloguing of the documents in the Aleph system. A study introducing the volume was prepared.

A total of five manuscripts and one historical printed document from the SL collection were investigated and catalogued according to the appropriate parameters for the purpose of their digitalisation. They were subsequently digitalised as part of the VISK 6 program. The digital copies are available in the Manuscriptorium.

An expert study entitled *The Old Believers Prints from Klinty in the Slavonic Library in Prague*, the manuscript of which has been submitted for peer review, was prepared as a result of the expert research into selected printed historical documents. New research into the printed documents published by Russian emigres in the Czechoslovak Republic and the relevant archive sources

continued for the purpose of mapping out in detail the life of the Russian emigres active within the territory of the Czechoslovak Republic in the period from 1918 to 1945. The manuscript of a new updated and expanded edition of *Adresáře ruské Prahy* [A *Directory of Russian Prague*] prepared by Anastasia Kopřivová was completed.

The work dedicated to research in the special collections at the SL focused on: 1) completing the classification, cataloguing and digitalisation of the collection of materials dedicated to the cultural and social life of the Ukrainian diaspora from 1915 to 1947 (T-UEP). The *Společenský a kulturní život ukrajinské emigrace (1915–1947)* [Social and Cultural Life of Ukrainian Emigres (1915–1947)] study was prepared (it will be published in Ukrainian), the manuscript of which has been submitted for peer review; 2) the classification and cataloguing of the collection of work documents related to the history and activities of the SL.

#### **Area 4. Digital codicology and librarianship**

*Project leader: Zdeněk Uhlíř*

Manuscriptorium 4 was created and released in its beta version in 2021. This involved the innovation of the search system and the reorganisation of the search results so that they complied more closely with the user requirements. The module for the creation of virtual exhibitions and other digital network publishing products was integrated more deeply

into the personalised individual account meaning that it is possible to include data created by the end users (paradata) in the Manuscriptorium content. A database full of texts correlated with complex digital documents was incorporated into the Manuscriptorium system as another external module. The contents of Manuscriptorium 4 were extended to include information designed for amateur end-users.

IIIF technology was implemented to enable the complex creation of manifestoes for collections (book collections), comprehensive documents (individual books), partial digital objects (individual pages) and fragments (details on the pages). Persistent addressing has been assigned to all these levels, meaning that the unequivocal identification of all types of digital objects is possible. This enables fully functional communication between the sources and the data exchange, i.e. an easy approach to creating a virtual research environment for working with older written and documentary heritage, as well as the preparation of paradata (data created by the end-users and bound to the data and metadata of one or more network sources) and ultimately digital network publishing.

A TEI document administration system was created in the beta version of Manuscriptorium 4 and it not only enables searches in the catalogue and data display on the basis of the international TEI P5 ENRICH specification, but also the creation of virtual collections that are important in heuristics and virtual exhibitions, as well as data articles that are important

in the digital publishing of research results within the framework of an individual, personalised user account. The beta version of Manuscriptorium 4 also included a module full of texts from primary documents that are correlated with the digital copies of the original historical documents included in the digital library. The full texts have also been prepared in accordance with the TEI standard, meaning that it is possible to perform operations that use the documents both in the catalogue module and in the full text module, which will enable much more sophisticated searches of the Manuscriptorium's entire contents in the near future.

The EDM (EUROPEANA Data Model) ARMA Specification and IIIF (International Image Interoperability Framework) ARMA Specification methodologies were created as part of the work on the European ARMA (the Art of Reading in the Middle Ages) project and they will be mapped in the TEI P5 ENRICH specification, the standard used in the Manuscriptorium. This will enable the interoperability of the Manuscriptorium with Europeana, as well as with third-party systems.

A tool was created for generating IIIF manifestoes and IIIF collections and it has become part of the pilot operations of Manuscriptorium 4, in which the user creates regular work in the thematic collection system's graphic interface from records, documents, notes, external links, images or audio and video streams. When combined with the Charlene (reading and browsing IIIF manifestos) and M-ERC (re-use European content) tools, it is possible to automatically



or at least semi-automatically create and use a virtual research environment for written and documentary heritage. Electronic network publishing, which has only been possible in linear form to date, is now possible in a hypertext form. It is therefore possible to create and use complex digital documents containing various data types (text or full text, pictorial, audio or video) with the alternate structuring of primary, secondary and tertiary documents. Work also took place on the formal harmonisation (consolidation) of the documents currently and potentially entering the graph database of full texts which we had previously created. The objective is the automatic creation of correlations between digital images and the appropriate full text passages and vice versa, i.e. correlations between a fragment and a segment of full text is also easily possible using the existing tools. This is a matter of fundamental significance for the notes and annotation apparatus, as it will lead to digital network publishing being enhanced with a further layer. Preliminary work was also done on the ManDoŠ (Manuscriptorium for schools) module, which is the simplest form of digital network publishing. As a first step, we resolved the requirements of the end users (teachers, pupils) who will use this form of digital network publishing and possibly also participate in its creation. In association with this, we also resolved the requirements pertaining to the communication with the Manuscriptorium. This resulted in a more precise idea of what the entire module should look like and what internal sub-components it should have. The

coordination with the personal user account ensures that the boundary between didactic and research use is unobstructed, making it easy to use so-called individual, local knowledge.

#### **Area 5. Web archives for scientific research**

*Project leader: Marie Haškovcová*

The research activities continued with a search for options of providing access to archived data and metadata from the web archive for further scientific research. The Grainery software had been designed in previous years to provide an opportunity to extract and open up access to technical and administrative metadata. A certificated methodology for creating, storing and providing access to technical and administrative metadata from the web archive, which offered a theoretical framework for improved work with metadata and the inclusion thereof in further research, was created on the basis of this software. The web archive followed on from the previous results of the research into the current needs of the users in the area of web resources within an international context. When considering further options for the provision of access to the data and metadata from the web archive, the analysis focussed on the issue of expiring web content and the option of providing access to data and metadata about it. The research into international sources and the archival copies of websites that are subject to licensing within the Webarchive database

led to the focus being on the specification of the term of a so-called extinct website, which has yet to have been clearly defined in the literature involved with the issue of web archiving. The term link rot tends to be used more, but this involves the wider problem of the loss of interlinked resources. The researchers dedicated themselves to testing the status codes as the basis for an application used to detect extinct websites. It will be based on a script which identifies websites with the 404, 400 or 500 error messages from the Heritrix logs. The curator application will focus on the automatic detection of extinct websites, create further metadata and assist in identifying websites for a specialised database that provides information about lapsed websites to users and may contribute further knowledge about the disappearing layer of the internet's web sphere for further research over the long term.

#### **Area 6. Archiving digital data**

*Project leader: Václav Jiroušek*

The research into long-term archiving undertaken in the recent period has followed on from the results of previous years. Analysis continued into the area of the technical and administrative metadata necessary for the long-term logical protection of digital documents, as did research into the area of the selection of suitable file formats for the long-term archiving of digital data. Analyses of the PREMIS metadata standard

were undertaken and the significant properties were researched in 2019. In 2020, a draft of the significant properties of digital documents for various types of data was created and a method of entering them into the metadata of digital objects was proposed with the objective of enabling the entry of the most complete possible information about the object and thus reinforcing the inspection of its authenticity in the case of any anticipated future conversions into new formats. The acquired knowledge was compiled into an expert article in 2021, which was then submitted to the peer review process. The research into the area of the file formats associated with the prepared and proposed methodology for assessing suitable formats for long-term archiving that had commenced in 2019 and 2020 continued in 2021. Two format analyses focused specifically on the archiving of audiovisual documents and electronic publications were performed this year. Research was undertaken with regard to the format of the e-publications in the Czech book market and the suitability of the ascertained file formats for long-term archiving was assessed. A summary and comparison of the format policies for the receipt and archiving of e-publications at selected international institutions was also undertaken. A pilot study aimed at verifying the options for transferring electronic publications between the PDF format and its PDF/A archive variant was drawn up on the basis of the ascertained facts. The ascertained knowledge will be applied in two prepared,

peer-reviewed articles on the archiving of audiovisual documents and e-publications.

### **Area 7. Protecting book collections**

*Project leader: Petra Vávrová*

The research into the physical condition of the modern book collections continued in 2021, as did the work on the CZBRD application for research into collections with a predominant focus on the establishment of the original conditions of the specimens predominantly from the University Book Collection, the 19<sup>th</sup> century collection and the music collection. Work was undertaken on a total of 20,382 records in 2021. The editing of the original records also continued due to the establishment of intervention cards, predominantly involving deacidification, mechanical cleaning, conservation and repairs, but also due to the addition of photographic documentation, the weight of the specimen or the scanning of bibliographic information from Aleph. These edits have increased the precision of the information on the physical condition of the individual book specimens. The metal dies from the facsimile of the *Vyšehrad Codex* [Vyšehradský kodex] were also conserved, restored and repacked in protective film; the work was completed in 2021 and the dies and the photogravure plates were placed in long-term storage under suitable climatic conditions in the NL CR Archive. The work on the development of new gels with defined properties also continued. The

objective is to develop a deacidification method using a multipurpose vacuum chamber – the intensification of the method involving the deacidification of books “in situ”. The “in situ” book deacidification method requires the paper in the deacidified books to achieve a sufficient water content so that the compression of the book block leads to a continuous liquid phase being established due to the contact of the surfaces of the adjacent pages that enables the diffusion of the inserted alkaline compounds from the place of insertion to the surrounding pages in the book. The research into the application of hydrogels during the deacidification of paper and books undertaken last year reached the stage where we are able to add at least a 1% alkaline reserve to the deacidified document in addition to its deacidification. Practical tests involving the use of hydrogels at a size corresponding to a deacidified book presented us with a problem involving a significant dimensional change to the gels when adding the liquid phase to the book’s pages, which often led to the destruction of the hydrogel film during application. Unfortunately, the greater the liquid phase that the hydrogel film is capable of transferring, the weaker it is. This film is practically unusable for books with a format in excess of A5. A further disadvantage lies in its relatively significant thickness which does not enable a thicker book to be deacidified at once, because to do so would be to damage the binding. Nevertheless, this problem has been able to be resolved. Hydrogel with a maximum absorption ability can be combined

with high quality paper fibre after its mechanical disintegration and used to create paper that accepts at least 400% of the liquid phase when dampened and at the same time is sufficiently strong and able to be handled. Moreover, water absorption does not change its surface dimensions, but only its thickness which is a fraction of the essential thickness of the original hydrogel. Its price is likewise a fraction given the fact that it would be possible to produce it in a restoration laboratory using a commercially available superabsorbent polymer. Next year, it will be possible to use this superabsorbent paper to undertake and evaluate deacidification tests on books. A so-called mobile set for research in collections which contain all the necessary equipment and consumables has been created due to the long-term interest in research into the physical condition of the book collections displayed by various institutions throughout the entire Czech Republic. Two sets have been assembled, the first of which will be used exclusively for educational purposes, while the second can be lent to various institutions.

The determination of the concentration of gaseous pollutants in the depositories continued throughout 2021 at the Clementinum's Baroque Book Hall and also regularly at the other depositories, where the results have been compared and a correlation undertaken with measurements by a certified laboratory. The exhibition entitled *Restoring the Treasure of the National Library of the Czech Republic or the Secrets of the Restorer's Work*

[*Restaurování pokladů Národní knihovny České republiky aneb tajemství práce restaurátora*], which will take place during the 26<sup>th</sup> ICOM General Conference in Prague in 2022, was also prepared.

#### **Area 8. Modern publications in the Czech Lands after 1800**

*Project leader: Anna Vandasová*

This new research area supplements other research from the point of view of the options for researching and working with modern volumes not only from the point of view of their protection, as is the case in Area no. 7, but also with regard to the wider research activities that need to be devoted to this area at both the NL CR and other libraries and institutions. In 2021–2023, the research will mainly focus on selected periodicals published after 1945 and their regional versions. This research is not only being undertaken by experts from the NL CR, but also by those from other significant libraries with conservation collections, namely the ML (the Moravian Library) and the ORL (the Olomouc Research Library). The realisation team was also expanded to include employees from the North Bohemian Research Library in Ústí nad Labem. One of the main objectives is to optimise the tool for more effective and simple work with the regional versions of selected newspapers – i.e. the system for recording periodicals known as PerMonik. This tool

mainly functions as a platform where it is possible to record highly detailed information about the individual volumes of large periodicals down to the level of the pages, which cannot be easily and effectively done in library systems. This system enables the differences in the individual versions and the published versions to be recorded, while it is also possible to specifically designate any damaged or missing pages, specific binding characteristics, etc. All of this information can be further filtered and compared with the volumes at other institutions, which is a highly effective approach, for example when selecting volumes that are suitable for digitalisation.

The research team devoted itself to testing the system over the course of the year by entering data, especially on the *Czechoslovak Sport* [Československý sport] periodical. All the subsequent proposals for modifications were regularly discussed and recorded in the Github repository (<https://github.com/NKCR-INPROVE/evidence.periodik/issues>) in such a way so that the winner of the tender called during the course of the year was able to start with the required modifications to the application in line with the set priorities. The supplier and the researchers also worked intensively on creating a communication API for the periodical record system which was duly submitted at the end of the year as a result of the research (<https://github.com/NKCR-INPROVE/Permonik-API>). The PerMonik periodical recording assistant was presented at two

specialist events during the course of the year. Anna Vandasová and Josef Ludvíček provided information about the tool at the Library of the Present [*Knihovna současnosti*] conference held on 7–9 September 2021 with their presentation entitled *PerMonik as a Tool for Recording Periodicals* [*PerMonik jako nástroj pro evidenci periodik*]. Anna Vandasová also presented the research at *Periodical Memory: a Specialist Conference from the Cycle of the Book Culture of the 19<sup>th</sup> Century* [*Periodická paměť: odborná konference z cyklu knižní kultura 19. století*] held on 20–21 October 2021 in Jindřichův Hradec. Both the aforementioned events will also result in contributions to the proceedings.

#### **Area 9. Digital humanities**

*Project leader: Zdenko Vozár*

During 2021, it proved possible to put together a specialist team of external workers and to establish an internal work group to study the determination of authorship as one of the specific areas of digital humanities. At the same time, it also proved possible to designate the first structures for the formation of the *Digilab NL* general interdisciplinary digital laboratory. The laboratory will deal with data manipulation and support for the application of the digital humanities methods. This involves the assembly of research platforms in order to develop the know-how of the NL CR and its researchers with a threefold purpose. The first purpose involves helping the employees

at the NL CR to overcome the significant barrier of comprehending data analyses of digitalised/digital materials and setting up advanced artificial intelligence algorithms for text analysis, not only from a developer's point of view, but also from that of the data analyst. This is followed by enabling the NL CR employees to establish contact with similarly oriented workplaces in the Czech Republic and possibly also abroad, depending on the available resources, and finally to establish ways of simplifying the provision of data and the creation of data sets for researchers from the humanities and quantitative scientific fields and to simplify their orientation within the data services and possibly also the methods available to them. A specialised server with a graphic processor to support complicated tensor calculations was secured in order to ensure sufficient computing power optimised for this type of task and it will be used in the next year of the project to prepare the development of the model for determining the authorship of Czech prose authors from the late romantic period. Given the already existing field (material) specific projects at the NL CR, the *Digilab NK* project will mainly enable the long-term evaluation of the infrastructure and database results of specific projects at the NL CR by means of their direct inclusion in the basic research. At the same time, it will also enable a build-up of know-how at the NL CR in the area of the digital humanities and machine learning which will be fundamental for the conceptual provision of data, but also for the provision of qualified support

for the implementation of machine learning methods, so that the NL CR can generate its own data and metadata content. This therefore involves preparation for the creation of qualified capacities and resources for the technical support of researchers in the field of the textual, pictorial and metadata materials available at the NL CR and the patronage of workshops and datathons in specific research areas, whereby the first of them is to be realised in 2022. The interconnection of the parts of the national centres for research into artificial intelligence will make it possible to gradually develop the activities and roles of the NL CR in the field of the provision and machine processing of data and metadata.

#### **Area 10. The book as a medium in the Middle Ages and the Modern Age**

*Garant řešení: Mgr. Jan Vojtíšek*

The research into the book as a societal medium commenced with a systematic heuristic activity aimed at the individual types and genres of book production and their social impact and influence throughout the Middle Ages and the Modern Age. As such, the members of the research team focused on the standing and use of manuscript codices in the late Middle Ages, the development of printed production in the Modern Age and its influence on literary and artistic creation and the significance of cartographic production in the early Modern Age. The second axis of the research focussed



on a study into a specific historical personality, i.e. Saint Ludmila, and her reception in the book culture of the Middle Ages and the Modern Age undertaken by a team consisting of specialists from a number of fields in the humanities (history, codicology, theology, art history, musicology) under the leadership of Renáta Modráková. *The Book and the Veil. 1100 Years from the Death of Princess and Saint Ludmila* exhibition, which presented a picture of Saint Ludmila in various genres of medieval and modern book production (in hagiography, historiography, preaching, prayer books and musical creation) from an interdisciplinary point of view, was prepared as part of the fulfilment of the concept's sub-objectives. The exhibition was open to the public in the Clementinum Gallery from 13 December 2021 to 30 January 2022 and in the Mirrored Chapel from 14 to 16 January 2022. At the same time, a virtual exhibition of the same name was also published in the Manuscriptorium, the digital library of the NL CR

(<https://beta.manuscriptorium.com/disseminate/index.php?pid=61b0cf94130fc1.39345100/kniha-a-zavoj>). The results of the research were also presented in a cycle of lectures entitled *From the Clementinum's Treasures [Z klementinských pokladů]* organised by the Manuscript and Early Printed Books Department, of which three lectures were thematically connected with the aforementioned exhibition. Some of the sub-aspects from the researched topic of the book as a medium in the Middle Ages and the Modern

Age were also presented in a series of educational videos published on the NL CR YouTube channel.

## **B. Research and development program projects**

A number of projects were undertaken in 2021 thanks to special-purpose financing from the NAKI II program of the Ministry of Culture of the Czech Republic and the ÉTA (2018–2025) program of the Technology Agency of the Czech Republic in support of applied social and humanities research, experimental development and innovation:

### **Synthetic materials in book collections**

*Grant recipient: the National Library of the Czech Republic*

*Project leader: Petra Vávrová*

*Project period: 2018–2022*

The project's objective involves specialised research into extensive book collections focused on synthetic materials, especially those with a lower stability and lifespan (this most commonly involves materials such as PVC, nitrate or acetate cellulose and polyurethanes), research and development into non-destructive and slightly destructive diagnostic methods and procedures for evaluating the safety, durability and economic aspects of the application of modern materials and technologies. The project has further focused on the development of procedures for restoring and preserving synthetic materials. The results of the development

and verification of the methods and work procedures pertaining to the conservation and restoration of synthetic materials will not only be of use to book collections, but also with regard to any cultural heritage produced from plastics in general. The project's focal point in 2021 involved the finalisation of its planned primary and secondary results. The submitted methodology entitled *Care for Plastic Book Bindings – Storage, Handling and Access Conditions [Péče o plastové knižní vazby – podmínky uložení, manipulace a zpřístupnění]* and the monument procedure entitled *The Restoration and Conservation of Synthetic Binding Elements in Modern Book Collections [Restaurování a konzervace syntetických vazebních prvků novodobých knihovních fondů]* were submitted for certification. The methodology entitled *A Method for Researching Plastic Book Bindings in Modern Book Collections [Metodika průzkumu plastových knižních vazeb v novodobém knihovním fondu]* is likewise undergoing certification. A further project result involves an article entitled *Cleaning the Plastic in Book Covers Made of Nitrate Cellulose [Čištění plastů knižní desky z nitrátu celulózy]*, which was published in the specialist peer-reviewed periodical *Fórum pro konzervátory-restaurátory*, and the article *Using of System SurveNIR for Identification of Plastics in Library Collection*, which was published in the peer-reviewed *Bibliosphere* periodical (Russian Index of Science Citation). A team of workers from the University of Chemistry and Technology in Prague also prepared an article entitled *Evaluating the Condition of*

Book Covers Made of Soft Polyvinyl Chloride [*Hodnocení stavu knižních desek z měkčeného polyvinylchloridu*], which is to be published in the *Chemické listy* magazine in 2022. The project overlap involves the activities of the project team's members in relation to the activities of the Plastic working group under the Conservator-Restorer Committee at the Association of Museums and Galleries of the Czech Republic. The Plastic working group has brought together specialists from a number of museums, galleries, archives, libraries and universities from all over the republic since 2014 and its objective is to share information and cooperation with regard to taking care of the modern synthetic materials found in collections, the numbers of which are constantly rising. The activities of the team from the NL CR and the University of Chemistry and Technology in Prague also resulted in a monograph entitled *Chapters from the Conservation and Restoration of Plastic II* [*Kapitoly z konzervace a restaurování plastů II*], which was published by the Methodological Centre for Conservation at the Technical Museum in Brno in 2021. Preparation also commenced on an exhibition entitled *The Plastic Age in Book Binding* [*Doba plastová v knižní vazbě*]. This is the main project output and it will take place during the 26<sup>th</sup> ICOM General Conference that will be held in Prague in 2022.

**RightLib – The provision of electronic access to protected publications**

*Grant recipient: the Library of the Czech Academy of Sciences*

*Project leader: Martin Lhoták*

*Responsible individual on behalf of the NL CR: Vít Richter*

*Project period: 2018–2022*

The work on the RightLib project proceeded according to schedule and the set milestones for 2021 were achieved, albeit that this was significantly influenced by the situation involving the changing arrangements associated with the various forms of access provided to out-of-commerce works and the agreements on the provision of access to most library content during the period of lockdown. The project is a joint venture between three libraries that have long been dedicated to developing and optimising the Kramerius digital library, which is especially intended to provide access to digitalised modern documents: namely the Library of the Czech Academy of Sciences (LCAS), the Moravian Library (ML) and the NL CR. In 2021, the work focused on developing the Kramerius system, especially in association with the introduction of licences for out-of-commerce works (hereafter simply referred to as OOCW) and also other licences in general; this generally mainly involved the multi-round provision of access according to licences such as COVID, OOCW-O and OOCW-T. These modifications were used in the Kramerius 5 version at

the NL CR, ML and LCAS and they enabled a high degree of use of the digital content, especially during the period of the Covid lockdown. At the same time as the licenses were being resolved, the development work focused on completing the new Kramerius 7 version of the Kramerius system, which has been implemented at the ML and is undergoing trial operations. The area of the iOS and Android mobile applications for the digital library was also resolved in parallel. These applications are now fully functional and only require any essential modifications brought about by external influences, such as new versions of the iOS and Android operating systems, or modifications bound to the development of Kramerius.

A big shift occurred in the realisation of the Czech Digital Library (CDL). The NL CR, ML and LCAS agreed to divide the roles during its operation and further development, whereby the LCAS will coordinate the software solution's development, the ML will secure the operation of the primary instance and the testing and the launch of any new versions and the NL CR will mainly be involved in the contractual arrangements with libraries and copyright holders (OOCW), content administration and the operation of the secondary instance. This division of responsibilities will enable the operation and development of the CDL to be secured more effectively, thus leading to it becoming the central access point to the digital content of libraries in the Czech Republic. The infrastructure that constitutes the foundation for the creation of a completely new

instance of the CDL based on Kramerius 7 was prepared at the ML in 2021. The tests, which had already partially taken place in the previous year, proved that the new solution based on the Akubra data warehouse should be technically suitable, even for data volumes in excess of 100 million pages, which was verified when the ML indexed the complete contents of Kramerius, which took several days. The infrastructure at the ML is based on the Kubernetes system, while the Solr Cloud is currently being used instead of a regular Solr installation. This configuration enables the effective scaling and load sharing of the servers and at the same time simplifies the launch of any new versions. The index will initially be updated at the ML and subsequently mirrored at the NL CR, while both instances will be operated in a mutual load-sharing mode. The instance at the NL CR will serve as a backup, if there is an outage in the primary instance at the ML. The *Methodology for Securing Safe Data Access as Part of Various Modes of Access to Digital Content [Metodika pro zajištění bezpečného přístupu k datům v rámci různých režimů zpřístupnění digitálního obsahu]* has been created in the NL CR project.

***The virtual reconstruction of dispersed book collections of Czech provenance in local and international libraries***

*Grant recipient: the National Museum*

*Project leader: Richard Šípek*

*Responsible individual on behalf of the NL CR:*

*Tomáš Foltýn / Anna Vandasová*

*Project period: 2018–2022*

This joint project between the National Museum, the National Heritage Institute and the NL CR is based on the previous experience of the individual parties with regard to research into the issue of book provenance. The aim of the project is to virtually reconstruct dispersed collections of Czech provenance in local and international libraries and to perform other activities associated with the popularisation of our book culture. The *With Deepest Regards [V nejhlubší úctě]* exhibition held at the Kozel Château from 1. 6. to 31. 7. was a joint project between these research institutions. The exhibition and the critical catalogue summarised the results of the provenance research undertaken in a number of historical book collections, whereby the book dedications by interesting historical personalities from the ranks of the higher and lower nobility, scientists, writers etc. were the main topic of interest. Work also continued on the collection research and the mapping of the provenance symbols in the collections of the Manuscript and Early Printed Books Department – the *Bibliotheca nationalis* collection.

Approximately 1200 volumes were processed from shelfmark series 49 (*Philosophia nationalis*), as well as part of shelfmark series 50 (*Historia profana nationalis*). The conclusions from the research to date have been presented in a peer-reviewed article entitled *The Jesuit Collections of the National Library of the Czech Republic in the Light of Provenance Research [Jezuitské fondy Národní knihovny ČR ve světle provenienčního průzkumu]* published in *Acta Musei nationalis Pragae – Historia litterarum*. The study presents a clear report on the origins of the Jesuit collections stored in the NL CR historical collection. A further segment of the work involves the creation of authority records in the database of national authorities, from where they are subsequently imported into the Provenio database. Both personal and corporate records are created. The systematic supplementation of the authority records with photographic documentation continued in 2021. Approximately 83 new personal authority records were entered into the Provenio database. The consultation with the supervisors continued. The research into the issue of monastic libraries also continued in 2021 and Luboš Kokeš participated at the *Monasteria abolita. The Fates of the Monastic Estates from the 2nd Half of the 18<sup>th</sup> Century to the 2nd Half of the 20<sup>th</sup> Century [Monasteria abolita. Osudy klášterních statků od 2. poloviny 18. do 2. poloviny 20. století]* conference held in Želiv on 5–7 October 2021. The study concept that originally mainly focussed on the area of the transfer of château library collections from the 1920 s to 1950 s was reassessed at

the very end of the year. The materials that had been collected and studied from 2018 to 2020 (the National and University Library, the Ministry of Education, the State Heritage Administration, the National Culture Committee, Zdeněk Wirth etc.) were thus compiled into an extensive study entitled *The Administrative Mechanisms for Transferring Book Collections in 1918–1954; a Springboard to Research into Book Provenance* [Správní mechanismy přesunu knižních fondů v letech 1918–1954: odrazový můstek k výzkumu knižní provenience] published in 2021 in a monothematic edition of *Acta Musei nationalis Pragae – Historia litterarum* (authors: Luboš Kokeš – Marcela Sulženko).

**The development of a centralised interface for mining large amounts of data from web archives**

*Grant recipient: the National Library of the Czech Republic*  
*Project leader: Tomáš Foltýn,*  
*from 1. 5. 2021 Marie Haškovcová*  
*Project period: 2018–2022*

In 2021, the project entered its third and final stage focused on the integration, implementation and completion of the software tools, their use in applied scientific outputs and the establishment of a graphic user interface. The representatives of all the partner institutions (the NL CR, the University of West Bohemia in Pilsen and the Sociological Institute of the Czech Academy of Sciences) in cooperation with InQool, a. s.,

an external company, contributed to the development of the user interface and the export application for data sets, dealt with the user and functional requirements, tested the interface with an emphasis on the intuitiveness of the environment and designated the hierarchy of functional importance. The network analysis options were also formulated according to the chosen filters and work was undertaken on developing the interface's user design. The application works above the HBase database, where the results of the processed harvests are stored. The use of the latest models of artificial intelligence not only leads to the acquisition of clean text with metadata, but also to the mining of information, such as the topic, sentiment or type of page. The entire solution can be run in parallel thanks to the Hadoop and Spark technology. A cloud integration environment with HBase functional implementation was deployed at the NL CR at the beginning of the year and the changes in technology have led to changes in the solution for the distribution environment. Integration, content and functional tests of the supplied software functionalities took place within the integration environment and analytical queries were realised in relation to the data. The interface's application layer has been arranged by means of independent continual integration. Several articles have been compiled and published in specialist periodicals or conference proceedings and material has been prepared for a monothematic edition of *the Czech Sociological Review* [Sociologického časopisu] entitled

*Big Data and Social Sciences: Opportunities, Problems and Solutions* [Big data a sociální vědy: příležitosti, problémy a řešení], the aim of which is to present the work on big data in the social sciences and the option of using web data. The interface was presented to both Czech and international audiences at a number of specialist conferences.

**The use of display methods to study hidden information in books**

*Grant recipient: the National Library of the Czech Republic*  
*Project leader: Petra Vávrová*  
*Project period: 2018–2022*

The project's objective involves specialised research undertaken in the extensive book collections focused on the hidden information contained in books and bindings, the reading of invisible text, rendering usually invisible details visible and so on. The project's focal point in 2021 involved the finalisation of its main results, i.e. two methodologies which are *The Methodology for Non-Invasive Research into Books* [Metodika neinvazivního průzkumu knihovných jednotek] and *Making Watermarks in Handmade Paper Visible and the Documentation Thereof* [Zviditelňování filigránů (průsvitek) v ručním papíru a jejich dokumentace], which are currently undergoing the certification process. A search was made for books in the Slavonic Library's collection, in which the occurrence of



secondarily used materials, disappeared fragments or removed texts were anticipated, but this year the search also newly applied to the music collections at the NL CR. The research has focused on the older specimens in the collection and on documents where there is an increased need to search for symbols of provenance or information about the owners or users of the specimens. Samples involving real bookbinding specimens were subjected to testing with regard to the efficacy of the individual depiction technologies, i.e. a video spectral comparator and radiography. The selected methods were tested for the purpose of verifying their safety in relation to the collection materials and any eventual damage to them. Further tests were undertaken on the depiction of watermarks and the summarised notes on the paper properties and the forms. The specific results acquired through the use of the depiction methods, namely radiography for the depiction of information in the bookbinding, were presented in the form of an article in the almanac from the 2020 Craft and Book international conference entitled *The Use of a Video Spectral Comparator during Document Research* [Využití videospektrálního komparátoru při průzkumu dokumentů]. The article was presented at the conference online in 2021. We prepared a specialist article for an international periodical entitled *Imaging Techniques for Survey of Book Collections*, which is undergoing a peer review and should be published in the *Bibliosphere* magazine at the beginning of 2022. The pictorial output of the depiction methods and their

graphic processing were also evaluated throughout all of 2021. Graphic modifications are used to perform the most detailed research into the images acquired from the devices designated for the research and for testing the materials in the NL CR book collection, which are important from the point of view of scientific research, material analysis and restoration research. In 2021, these modifications were once again performed using the Adobe Photoshop program, graphic software that has been designed for the modification of bitmap files. Other software from Adobe Systems, i.e. Adobe Illustrator for working with vector graphics and Adobe InDesign for the composition of documents, posters and other promotional materials, have also been used for the presentation and final post-production of the project outputs. A specialist article about these graphic modifications to the images has been published as a result of the project. The preparations for an exhibition entitled *The Secrets of Books* [Tajemství knih], which is the project's main result and will be held during the 26<sup>th</sup> ICOM General Conference held in Prague on 20–28 August 2022, also took place.

***The new phonograph: let us listen to the sound of history. The creation of procedures and tools for records, digitalisation, the provision of access and the long-term protection of audio records on historical media held at memory institutions***

*Grant recipient: the National Museum*

*Project leader: Filip Šír*

*Responsible individual on behalf of the NL CR:*

*Zuzana Petrášková*

*Project period: 2018–2022 (for NL CR 2018–2020)*

Four institutions participated in the project: the National Museum, NL CR, LCAS and the Faculty of Arts at Masaryk University. The participation of the NL CR in this project was no longer financially supported in 2021 according to the contract. Contact has continued with the researchers, as has the preparation for a study into the collection of historical audio documents stored at the NL CR.

***The research and development of advanced book and manuscript reading technologies***

*Grant recipient: the Czech Academy of Sciences, the Institute of Chemical Process Fundamentals*

*Project leader: Jiří Smolík*

*Responsible individual on behalf of the NL CR:*

*Petra Vávrová*

*Project period: 2018–2022*

The project is part of a cooperation agreement with the laboratory at the Department of Chemistry and the Physics of Aerosols and the Department of Laser Chemistry at the Institute of Chemical Process Fundamentals of the Czech Academy of Sciences. The project's objective is to create new procedures that can be used when restoring book and archive collections, specifically laser cleaning and the pneumatic cleaning of document surfaces using a dual-phase spray. The intention of the proposed project involves research into and the development of new cleaning methods for the surfaces of archive items that have become soiled with fine particles and nanoparticles or other types of soiling. This is especially important, because the fine dust particles and nanoparticles present in the depositories contribute the most to the degradation of the book and archive collections. The development of a cleaning method using both procedures will be undertaken with various types of book and archive materials which have already been used in previous studies. This involves materials based on cellulose (Whatman 1 filtration paper, handmade paper from Velké Losiny and industrially produced lignin-containing paper dating from 1960) and collagen materials (binding parchment and tannin-treated binding leather), which will be soiled with real dust either through long-term exposure in selective archives or mechanically. Both techniques will also be used to clean book materials that have become soiled by means of an increase in

microorganisms and the effects of natural disasters (floods, fires), where difficult to remove traces, such as mould or coloured stains, have remained on the surface of the materials. The activities in 2021 resulted in significant movement towards resolving the project, especially the completion of two utility models, one of which exceeds the framework of the planned results, the submission of two methodologies and the publication of two articles in specialist periodicals. The results of the project have shown that cleaning using the studied methods involving a TEA CO<sub>2</sub> laser and a dual-phase spray under selected conditions achieves very good results when compared with the regularly used methods of mechanical cleaning. These treatment methods therefore have great potential to become a suitable alternative to the traditionally used procedures. The work in the next project phase will mainly focus on assembling a line for cleaning books and documents and the dissemination of the results. The project's main result was also prepared in 2021, i.e. the result of a type of semi-operation entitled *A Line for Cleaning Book and Archive Collections* [*Linka pro čištění knihovních a archivních fondů*] which will include a description of the preparation of the collections for cleaning and the actual cleaning process using a selected cleaning machine and any other procedures.

***DL4DH – The development of machines for the more effective use and mining of data from digital libraries in order to reinforce research in digital humanities***

*Grant recipient: the Library of the Czech Academy of Sciences*

*Project leader: Magdaléna Vecková*

*Responsible individual on behalf of the NL CR: Zdenko Vozár*

*Project period: 2020–2022*

The work on the implementation of all the sub-components of the DL4DH software solution (the Kramerius+ database, the TEI Convertor and the Feeder front-end interface for the provision of data) commenced in 2021. All of the points in the tender documentation for the development and integration of the software were gradually analysed with the participation of a team from the NL CR as part of structured discussions during regular meetings and communications on the GitHub platform, while taking into account the response and capacity requirements of the large digital libraries that will be used as primary data sources. The overall architecture of the constructed system was reviewed in detail and finalised, in which case it was necessary to clarify the relationships between the individual components in the architecture, including the method of connecting with the most widespread digital library system in the

Czech Republic, the Kramerius system. The individual components and modules in the software solution and their affiliation with the partial software interfaces were defined, while sustainable data flow principles were also set. It is precisely the architectural clarity and long-term sustainability of the data flows within the framework of the actual operations that constitute significant requirements for the NL CR. The anticipated demands arising from the operation of the production environment and the associated options for scaling and creating user query queues were also taken into account and regularly analysed. This was especially the case with regard to the management of the administration processes and the options for replicating the databases and indexes. Detailed specifications, which reflect the anticipated user needs, were subsequently created for every point stated in the tender documentation, just as in the case of the proposed system architecture. The external supplier, who was regularly consulted during the full team meetings of the technical and scientific specialist representatives from the teams, commenced the development on this basis. Corrections to the development were made on the basis of the presented Feeder wireframes and the functional prototypes and data models of the Kramerius+ backend database, which were also verified by the team from the point of the designated project objective – the creation of a so-called *Map of Significance for Religious Studies* [*Mapa religionistických významů*] in 2022. In the second half

of 2021, the work focused on the completion of the definitions for the data exports in various formats (especially XML/TEI and JSON). These outputs were tested on real data coming from the processing (ingestion) of packets according to the National Digital Library standards.

The NL CR team worked intensively on creating the so-called *Map of Significance for Religious Studies*, which focuses on searches for biblical quotations appearing in selected periodicals from the interwar Czechoslovakia of the 1930 s, from the beginning of the year. This involved the verification of the data sources and work performed for the purpose of their completion. Yet another significant step in the preparation of the entire analysis involved the creation of a database of the most widespread period versions of translations of the Bible, which could have been used and cited in the designated period. This was undertaken on the basis of the fact that a decision had been reached at internal meetings as to the fact that the project would work with explicit citations and would disregard various (including widespread) allusions, because their definition, verification and quantitative characteristics are accompanied by a number of methodological problems rather than technological ones. This ancillary digital corpus will enable the sensitivity of the used comparative algorithm to identify the individual citations to be radically increased. There was also a significant improvement in the

detection core used to process the periodical press. As a result, this approach will lead to the debugging of the machine processing with a degree of detection uncertainty that will significantly limit the necessity of manually inspecting the input data. The work on the map's web presentation was prepared in the form of the specifications and requirements as to what the map should look like and was subsequently submitted to the graphic designer. The map will not only contain the project's introductory presentation, but also an interactive visualisation of the achieved results. In the spirit of a proof of concept, it will provide Kramerius+ and Feeder users with a demonstration of the data analysis and visualisation based on the corpus that has been made available and on the widely relevant topics pertaining to the religious-cultural reception of the Bible in the First Republic press of differing types and political persuasions from the point of view of religious studies, political science and so on. Another associated workflow, including the evaluation of the results and the offer of pre-prepared data collection from other areas, will also be described within the framework of the creation of this map for those scientific workers who wish to create a similar map using a different data set. The NL CR also continued with the selection, physical preparation and subsequent digitalisation of titles within the framework of its selected thematic collections in 2021. These collections may serve the project's researchers in the creation of a so-called

use case for testing the tools developed within the framework of the project and for the creation of the methodology, which has been planned as a result for 2022. However, these collections will mainly serve to develop the digital library's thematic areas. The great benefit of these collections not only lies in the fact that they will lead to the supplementary digitalisation and completion of a number of thematic/edition units, but that they will do so for both data researchers and regular users. The collections can be used as a predefined data set not only in Kramerius+, but also within the digital library's regular interface. The realised collections include Spiritistic Literature in Bohemia 1870–1945, Masonic Literature in Bohemia 1870–1950, Czech Esoteric Literature 1870–1950 and Czech Toponymy.

#### **Czech book illustrations in the early Modern Age**

*Grant recipient: the National Library of the Czech Republic*

*Provider: the Technology Agency of the Czech Republic*

*Project leader: Vojtěch Šícha, the Library of the Czech Academy of Sciences*

*Researcher on behalf of the NL CR: Lucie Heilandová*

*Project period: 2021–2023*

The project has been realised by a team of specialists from the LCAS, NL CR and the inQool technology company with the financial support of the Technology Agency of the Czech Republic under the *ÉTA* program. The objective is to provide access to pictorial

material located in old printed works published in the Czech lands up to the second half of the 16<sup>th</sup> century and in doing so to create a virtual research environment for the study of book illustrations with the help of new digital tools that provide a new view of the visual and material culture of the early Modern Age in the Czech lands. The prepared online database will enable the comparison of the pictorial material and offer a pleasant research environment, thanks to which researchers will be able to monitor, for example, woodcut block production, its use, copying and circulation, the sources of inspiration for its production or the occurrence of any iconographic motifs and the transformation of any artistic styles within the framework of the entire Czech printed production up until the mid-16<sup>th</sup> century. In 2021, the pictorial material located in thousands of Czech printed works from up to the mid-16<sup>th</sup> century was recorded and work commenced on processing the researched material located in the NL CR collection. During cataloguing, the emphasis has not only been placed on recording all the information about the origins (information about the author, the printer, the creator of the woodcut, the illustrator or the designer or about the source of inspiration), but especially on the actual description. The catalogue record also contains a pictorial supplement (an image of the entire page and a segment with the described illustration) which is essential when working with the image and which

can then be further processed within the created virtual environment. International cooperation was established from the very beginning; the online database will use digital tools developed by the external project partner, the Visual Geometry Group from the University of Oxford, while the provision of access to the pictorial material has been consulted with members of Digital Humanities Oxford, who have long been involved in dealing with this issue. The *Manual for the Database Processing of Book Illustrations in Historical Collections at Memory Institutions* [*Manuál pro databázové zpracování knižní ilustrace v historických fondech paměťových institucí*], which has been made available on the project's website at [www.e-ilustrace.cz](http://www.e-ilustrace.cz), was also created during the course of 2021. The document consists of three parts, which contain the rules for the bibliological and iconographic description, cataloguing and digitalisation and enable a uniform processing workflow to be established.



## C. Involvement in large research infrastructures

### **LINDAT/CLARIAH-CZ**

*Grant recipient: the Faculty of Mathematics and Physics at Charles University*

*Project leader: Jan Hajič*

*Responsible individual on behalf of the NL CR:*

*Tomáš Foltýn, Michaela Bežová from 1. 5. 2021*

*Project period: 2019–202*

The large LINDAT/CLARIAH-CZ research infrastructure, which consists of 13 partner institutes, is not only involved in language data, but also in digital data and the tools that are used for this data. In addition to the NL CR, this infrastructure also includes two other libraries with significant digital content: the ML and LCAS. Each partner institution involved in the infrastructure deals with activities that are associated with its own digitalised data and the data sets that it has available within its institution and which it is endeavouring to make accessible by means of an open approach to users. In 2021, the NL CR and the other involved libraries concerned themselves with the development of the Kramerius digital library as a continuation of their work from the previous year. The members of the research team also actively participated in regular meetings with the individual partner institutions, but also in seminars and conferences which were organised under the auspices of LINDAT/CLARIAH-CZ, for

example the DARIAH-CZ National Workshop 2021 or Digital Data through the Perspective of a Humanities Scientist [Digitální data perspektivou humanitního vědce]. Curatorial work involving the inspection of the metadata from the already digitalised titles and the systematic selection of titles for digitalisation from the humanities and social sciences was also undertaken throughout the year.

## OTHER APPLICATION PROJECTS

### A. National Projects

#### A. 1 The Library Public Information Service (VISK) Program

All the projects in the individual sub-programs are for a one-year period. These projects concern support for specific library activities in the areas of education, the operation of digital libraries, the production of digital data (the retrospective conversion of catalogues and the digitalisation of collections), the operation of information portals, access to digital sources and so on. The list of projects no longer includes the statutory activities that were formerly financed from the VISK program, for which the NL CR received funds directly into its budget.

*VISK 1*

#### **The VISK coordination centre program**

*Responsible employee: Vít Richter*

*URL: <http://visk.nkp.cz/>*

The VISK coordination centre program secured all the specialist, organisational and coordination activities associated with the realisation of the entire VISK program.

#### **Sociological research into “Czech Children as Readers in 2021”**

*Responsible employee: Vít Richter*

*URL: [https://ipk.nkp.cz/odborne-cinnosti/ctenarstvi-1/12\\_Cten.htm#pruzkumy](https://ipk.nkp.cz/odborne-cinnosti/ctenarstvi-1/12_Cten.htm#pruzkumy)*

The project's objective involves the realisation of repeated, nationwide, representative research into the reading habits of children and young people between the ages of 6 and 19 with a focus on the reading of books, reader behaviour, usual methods of spending leisure time and the influences of the family and school environment on children's relationships with books and reading. The research was realised using quantitative and qualitative methods with target groups of children aged from 6 to 8 (the youngest school-age children), 9 to 14 (older children) and young adults aged 15 to 19 (young people). The subject of the research also included the parents of the

children in the 6 to 8 category. The research was undertaken in cooperation with the NL CR and the Nielsen Admosphere agency. It was realised using the CAWI method (online data collection) with a representative sample of 2040 respondents based on a quota selection in accordance with the sociodemographic structure of the population of the Czech Republic. In addition to the research oriented towards the child population, a shorter piece of research into the adult population (15+) was also undertaken with the aim of ascertaining the influence of the coronavirus pandemic and the associated leisure time restrictions on media activities and readership. The research was realised on a sample of 1005 respondents using the CAWI method in association with the Institute of Czech Literature at the Czech Academy of Sciences and the Nielsen Admosphere agency.

***The conversion of GOOGLE document data into the TEI P5 ENRICH format***

*Responsible employee: Zdeněk Uhlíř*  
*URL: <http://www.manuscriptorium.eu/>*

Further batches of documents – old printed material – were converted and digitalised in cooperation with Google (ca 15,200 individual comprehensive digital documents) in 2021.

*VISK 2*

***Innovative information literacy courses***

*Responsible employee: Eva Dostálková*  
*URL: [https://ipk.nkp.cz/akce/03\\_OV\\_Akce/inovacni-kurzy-2021](https://ipk.nkp.cz/akce/03_OV_Akce/inovacni-kurzy-2021)*

The objective of the new innovative courses was to provide the required skills for working with ICT and at the same time to offer the option of increasing and expanding any advanced knowledge in this area to those who have already acquired the basic skills.

***Requalification courses according to the National Register of Qualifications***

*Responsible employee: Kateřina Nekolová*  
*URL: [https://ipk.nkp.cz/akce/03\\_OV\\_Akce/04\\_OVrekv.htm](https://ipk.nkp.cz/akce/03_OV_Akce/04_OVrekv.htm)*

The project's objective was to secure funds to finance lecturers at librarianship courses in order to minimise the participation costs for these courses. The course content is based on the National Register of Qualifications and the teachers are accredited specialists from the NL CR and external institutions. The courses are attended by people who are employed in libraries, but also by those who are simply getting ready to work in libraries. In 2021, only the *Librarian in Direct Services* [*Knihovník v přímých službách*] course was opened due to the demand and the pandemic restrictions. A total of 27 participants enrolled in the course.

***The NDL Complex Validator***

*Responsible employee: Natalie Ostráková / Václav Jiroušek*

The project's objective in 2021 was to create an updated form of the Complex Validator tool so that it supports the validation data created according to the latest versions of the NDL standards for the digitalisation of audio and printed text documents. The tool is used to validate the adherence of the created data to the rules for long-term archiving. An analysis of and a design for the Complex Validator tool, which will be used as the basis for the further development of the application in years to come, were created in a web version in addition to the updated version of the application, which is available in the open source mode.

*VISK 5*

***The retrospective conversion of the General Catalogue for NL CR Universal Library Collection I***

*Responsible employee: Nataša Mikšová*

The project's objective involved the preselection and preparation of approximately 42,000 printed records. The records were prepared for a further stage of retro-conversion. 11,500 new records in the MARC 21 format, which have been made available in the NL CR online catalogue and added to the Union Catalogue, were also processed at the same

time. The cyberattack in May and the subsequent malfunctioning of the RetriS application meant that it was not possible to import the planned number of records by the end of the year. The missing ca 3000 records will be made available in the NL CR online catalogue and subsequently added to the Union Catalogue by 15. 2. 2022 at the latest. 6,300 records have been created or merged in the NL CR online catalogue. Field 920 with a TIFF image number from the General Catalogue of the NL CR Universal Library Collection I has been added to these records. This mainly involves records of monographs that contain several works or reprints and have been analytically processed in the General Catalogue of the NL CR Universal Library Collection I. The records from the international book production of 1801–1950 have been processed in the alphabetical range of KEMM-KRATO. 6100 records that had already been the subject of a retrospective conversion were supplemented with selected elements from the material description.

VISK 6

#### **The digitalisation of historical documents at the NL CR**

*Responsible employee: Zdeněk Uhlíř*

*URL: <http://www.manuscriptorium.eu>*

In 2021, a total of 65 documents, i.e. 21,757 images/pages, from the NL CR (the Manuscript and Early Printed Books Department and the SL) collection

were digitalised. All of the digitalised documents have been included in the Manuscriptorium digital library.

#### **The digitalisation of rare historical manuscripts and printed works from the Music Department's collection**

*Responsible employee: Zuzana Petrášková*

*URL: <http://www.manuscriptorium.eu>*

19 manuscript documents from the Music Department's collection at the NL CR, i.e. a total of 4,374 images, were digitalised in 2021. The selected sheet music involves vocal-instrumental spiritual and operatic works by international and Czech authors. The digitalised sheet music is connected with an entry in the RISM International Inventory of Music Sources and is accessible to the researchers who use this database at [www.rism.info](http://www.rism.info) and in the Manuscriptorium digital library.

#### **The mass digitalisation of historical and rare documents in cooperation with Google – the continuation of the program**

*Responsible employee: Lukáš Babka*

In 2021, the preparatory work associated with the planned extension of the joint NL CR and Google digitalisation program commenced. The project focuses on the comprehensive pre-digitalisation

preparation of the documents from the SL collection. Part of the prepared work associated with the realisation of the program has been secured by the SL as one of its main activities. The project's funds enable the cataloguing of the documents prior to their digitalisation and the processing of the appropriate metadata (including equipping the documents with barcodes, the creation of new catalogue entries, the modification, expansion and elaboration of the existing catalogue entries, the creation of so-called hidden records in the case of multi-volume works, the processing of the appropriate metadata structure in the case of multi-volume works and the reduction of the relevant authority information). This preparatory work has been spread over a period of three years (2021–2023) so that the digitalisation can smoothly follow on from it in 2024. 1,600 individual documents were dispatched and verified during 2021. Their physical condition, content and formal aspects mean that 1,176 of these individual documents are suitable for digitalisation and they are now ready to be transferred to Google for the realisation of the digitalisation process.

VISK 7

**The reformatting of Čs. sport and Svět práce (Stage II) and the mass deacidification and research into the Czech language documents. The reformatting of Čs. sport and Svět práce (Stage I) and the deacidification of endangered Czech language documents**

*Responsible employee: Tomáš Foltýn (the program guarantor), Michaela Bežová (the realisation of the project)*

*URL: <http://kramerius-info.nkp.cz/>; <http://visk.nkp.cz/visk-7>*

The VISK 7 sub-program enables the submission of grant applications for activities associated with the physical protection of book collections. In 2021, the NL CR focused on the mass deacidification of its modern book collections, the protective reformatting of two titles and the purchase of archive quality cardboard which was then used to make protective folders. In addition to this, development work and the administration of the *Collection Research Application [Aplikace pro průzkum fondů]* and the *Register of Deacidified Documents [Registr odkyselených dokumentů]* tools was also undertaken. The funds requested under this project for miscellaneous personnel costs were used for the preparatory work associated with deacidification, digitalisation and the production of the protective folders and to a large degree for research into

the modern collections. The research into the modern collections is important from a number of perspectives. It is essential for ascertaining the actual condition of the library's collection, but it also plays a significant role during the selection of the volumes for restoration, conservation or deacidification. Thanks to the grant, several part-time workers were employed in 2021 and they were able to devote 1500 hours to research into the modern collections. 554.49 kg of book materials, representing 1040 volumes, were deacidified in 2021 thanks to the grant. As in previous years, the volumes were deacidified using the Papersave Swiss method, which is used by the Nitrochemie Company based in Germany. The digitalisation of the already selected *Československý sport* and *Svět práce* publications continued as far as the protective reformatting is concerned. Some of the volumes displayed signs of greater physical damage and had to undergo repairs before being placed on the digitalisation line, while the majority of them also had to have their bindings loosened. The editions of *Československý sport* from 1962 to 1972 and of *Svět práce* from 1968 to 1978 were digitalised during 2021. Protective folders (a total of 194) were created for all the volumes that were used for digitalisation, as well as for selected deacidified volumes. The development work on the *Collection Research Application* and the *Register of Deacidified Documents* mainly involved the updating of the program components so that they

function better. More significant development work has been planned for 2022. The regular seminar for the VISK 7 sub-program was realised in 2021. It was held on 4 November in a hybrid format, i.e. using the ZOOM platform and in person at the CDH. Around 90 people were able to attend the seminar thanks to this. The program not only concerned VISK 7, but also the newly created VISK 4 sub-program. A meeting called *Meet and Greet VISK 3, 4, 7*, which was open to the researchers in the sub-programs with specific questions which were answered directly on the spot, was also held on ZOOM on 25 November.

VISK 8/A

**Multi-license access to electronic information sources**

*Responsible employee: Hana Nová*

*URL: <http://visk.nkp.cz/visk-8-a>*

The provision of access to information sources continued in 2021. Czech sources – the Newton Company's media database was used by 53 libraries, while 31 libraries worked with the WoltersKluwer ASPI legal database and 28 libraries chose the LibraryPressDisplay database of international dailies and popular educational magazines.

VISK 9

**The Union Catalogue of the Czech Republic, including its development**

Responsible employee: *Eva Svobodová*

URL: <https://skc.nkp.cz> or <https://www.caslin.cz>

As of 31. 12. 2021, the database of the Union Catalogue of the Czech Republic (UC CR) contained 8,088,723 records (consisting of 180,982 serials, 316,328 old printed books and 608,882 special types of documents). 4,901 interlibrary loan service requests (from 124 different libraries to 227 different libraries) were sent in the UC CR environment. The number of libraries enabling the harvesting of records to the UC CR by means of an OAI protocol rose to 163 in 2021 (ca by 17% in comparison with the previous year). This is also associated with an increase in the number of libraries with an automatic write-off function for titles that have been withdrawn from the UC CR. These libraries are provided with expanded feedback with regard to the quality of the records that they supply. The UC CR harvests the data on Czech fiction processed by the Municipal Library of Prague under the CENTRAL project four times a day and in doing so enables its immediate use (download) by other libraries via the Z39.50 protocol. 98,454 duplications were manually removed from the UC CR in 2021.

VISK 9/1

**The coordination of the record supplementation and administration of the ANL base**

Responsible employee: *Petra Šťastná*

As of 31. 12. 2021, the ANL base (a selection of articles in Czech newspapers, magazines and anthologies) contained 1,875,482 records. A total of 45,498 records from 24 regional and specialist libraries were added in 2021 using the projects from the VISK 9/1 program or the libraries' own excerption. A total of 13 libraries (11 regional and 2 CAS libraries) contributed under the VISK 9/1 program and in doing so sent in 20,086 records (the number of records the libraries had committed to amounted to 20,260).

**The development and operation of the application for sending and editing authority records to the National Authority File for cooperating libraries**

Responsible employee: *Petra Šťastná*

The project's objective is to find a new way of sending authority records for cooperating libraries and to develop and operate the solution while taking into account the current technical, technological and security standards and with a minimum impact on the cooperating libraries in the area of securing the functionality of this process. The solution is a significant tool for library cooperation on the National Authority File. The project will be realised

until the end of 2025 on the basis of a concluded contract and the paid subscription. The service launch is planned for the second quarter of 2022 due to the necessary preparation, development and testing.

**B. International Projects**

**B.1 Program connecting Europe facility in telecom ARMA (the Art of Reading in the Middle Ages)**

Project leader: *Narodna in univerzitetna knjižnica, Ljubljana, Slovenia*

Responsible employee on behalf of the NL CR: *Zdeněk Uhlíř*

Project period: 2020–2022

The work on the ARMA project proceeded in 2021. The project will last until 30 April 2022 and has the objective of gathering together a collection of mediaeval manuscripts and providing access to it in Europeana. The NL CR especially contributed to the creation of the EDM ARMA Specification and IIF ARMA Specification methodologies (best practices), which are intended to become the standard for interoperability with Europeana. Given that work on mapping them to the TEI5 ENRICH Specification standard is also currently ongoing, this will result in the harmonisation of the network digital environment between the Manuscriptorium, Europeana and any third parties and will simplify both the aggregation of documents in the



Manuscriptorium and the integration of the services that the Manuscriptorium provides.

## **B.2 Cooperation with Google**

### **The mass digitalisation of historical and rare documents**

*Responsible employee: Miroslava Hejnová; Adolf Knoll*

The digitalisation of books ended in this project in April 2019. However, their conversion to the Manuscriptorium digital library continued in 2021 (see the VISK 1 sub-program). The conversion of those documents which temporally and materially belong to the National Digital Library also commenced. The conversion, download and decryption of any subsequently processed and incomplete data is also planned for 2022. The download of any data packets that displayed errors during conversion also took place. Google also additionally enabled the downloading of several other previously digitalised books.

## **B.3 Czechoslovak cooperation during the acquisition of documents**

### **The Czech Library at the Bratislava University Library and the Slovak Library at the National Library of the Czech Republic**

*Financial support: the Ministry of Culture of the Czech Republic, the Ministry of Culture of the Slovak Republic*

*Responsible employee on behalf of the NL CR: Jeanne Janoušková*

*Project period: continuously from 2006*

The Czech Library at the Bratislava University Library and the Slovak Library at the NL CR project has been realised on the basis of an agreement between the Ministries of Culture of both countries. Under this project, the NL CR purchased 737 book titles for 300,027 CZK for the Bratislava University Library in 2021. The total allocated funds were exceeded by 27 CZK.

The amount of 12,000 € provided by the Ministry of Culture of the Slovak Republic for the acquisition of Slovak publications for the collections at the NL CR and the Slavonic Library was exceeded by the amount of 5.20 €: a total of 728 publications were purchased for the NL CR and the Slavonic Library. According to a reader preference poll, Slovak books have long been among the most loaned foreign language titles (second only to titles in English) at the NL CR.

The project has been highly successful and beneficial for both the participating parties, including

because of the guarantee of mutual publishing access. The Slovak additions acquired throughout the years of the project's duration are accessible on the NL CR website at <http://aleph.nkp.cz/web/csknih/2021/index.htm>.

## **B.4 The Erasmus+ Program**

### **Building a network of community centred librarianship (NEWCOMER)**

*Project leader: Koninklijke Bibliotheek Netherlands*

*Responsible employee on behalf of the NL CR:*

*Vladana Pillerová*

*Project period: 2020–2022*

The NEWCOMER project, in which the NL CR is a partner along with six other European libraries, continued in 2021. The project focuses on cooperation between European libraries in the area of adult education and it is represented by seven countries: the Netherlands, Denmark, Germany, the Czech Republic, Slovenia and Italy. The Public Libraries 2030 organisation also contributes to the project. Four international meetings were held in 2021. These meetings constitute the essence of this project, which especially aims to assist in the exchange of experience. Two meetings were held online. The Royal Library of the Netherlands and the Cubiss organisation, which supports lifelong learning in different types of organisations including libraries, presented their experience acquired from community

libraries and adult education in the Netherlands. The meeting took place in January 2021. The second meeting was organised in June by the Danish Library in Aarhus and it likewise took place online. The library introduced the participants to its activities and the ways in which it contacts socially and otherwise excluded individuals. Peer-to-peer interviews between the project participants, from which a further series of interviews will follow at the end of the project, took place between these two meetings. These interviews will subsequently be assessed and the results will be used as one of the materials for the project's final report.

Two in-person meetings took place in autumn. The participants first met face-to-face in Milan in September. The meeting was organised by the CSBNO organisation which provides services to libraries in Lombardy. The participants were acquainted with the current challenges facing Italian public libraries and the activities performed by Italian libraries during the time of the pandemic. This was followed by a joint debate on all the aspects associated with the term community library. The project participants were invited to participate at the significant Italian Convegno Stelline 2021 library conference. An entire panel was dedicated to the participants and everybody contributed with a presentation about public librarianship in their countries. The current state of Czech public librarianship, its most significant activities and its challenges and problematic areas were also presented.

The last meeting in 2021 took place in Brussels in October. It was dedicated to a summary of the project's existing results and to setting its further direction. The planned November meeting in Cologne was postponed until 2022. The last three meetings are planned for 2022: in Prague, in Kranj in Slovenia and in Cologne. The NEWCOMER project maps out unused potential in European libraries in the areas of adult education and social inclusion. There is a risk that technological advances will increase the existing inequalities and most affect disadvantaged groups. Libraries have good conditions to enable them to become institutions in the local community that offer a wide range of educational programs to meet the needs of these disadvantaged groups. The fact that libraries offer digital resources and a trustworthy physical space contributes both to the digital and social inclusion of these groups.

The project's objective is to make it easier for library workers who work with adults in their communities to investigate with their counterparts from EU countries why the provision of adult education differs so greatly, how to best support adult students within the library environment and what examples of tried-and-tested procedures need to be used when meeting the needs of disadvantaged and marginalised groups. The project's main activity involves a series of international meetings with the participation of all the partners.

## ***B. 5 The Visegrad Collection***

### ***The written Visegrad heritage – protection for the future***

*Project leader: Budapest Főváros Levéltára*

*Responsible employee on behalf of the NL CR:*

*Petra Vávrová*

*Project period: 2020–2022*

The project's objective is to share knowledge from the area of the disinfection of archive and book documents, the creation of methodological documents, workshops – practical exercises on how to proceed and the creation of a multilingual dictionary of the terms and terminology in the languages of the V4. The cooperating institutions are Budapest Főváros Levéltára (the Budapest Municipal Archive), Slovenská národná knižnica (the Slovak National Library) and Wydział Biologii Uniwersytetu Warszawskiego (the Faculty of Biology at the University of Warsaw). The individual countries are losing a significant part of their cultural heritage which is decisive for the preservation of their national identity and national cultural treasures. Archive and library documents are often used by the wider public; the management of memory institutions is directly responsible for preventing the spread of infectious diseases via loaned documents. It is also necessary to educate future generations to take care of their cultural heritage and to protect it. Specialist workshops for the archivists and librarians

in the given region are planned under the auspices of the project. The objective is to provide access to the knowledge of restorers, to share specialist know-how as part of the cooperation between the V4 countries and to present knowledge in the area of the permanent preservation of collections and documents, including their deacidification. In 2021, there were two workshops and project teams meetings in Budapest and Prague, the subject of which was the creation of an online five-language (English, Slovak, Hungarian, Polish, Czech) dictionary of the specialist terminology and a global or general crisis plan in case of natural disasters and accidents, including the use of case studies. A dictionary consisting of 1,560 terms was created during both workshops and this dictionary will be completed during two further workshops in 2022 and published on the project's website. A further topic at the workshops involved the creation of a universal Emergency Plan and case studies which should assist in securing the collections and the places where they are stored. Emphasis has been placed on risk identification and possible solutions and approaches in the case of different types of natural disasters or building emergencies.

## **OTHER PROJECTS**

### ***The integrated system for the protection of movable cultural heritage (ISO)***

#### ***An addition to the Hanwell System – microclimate monitoring***

*Project leader: Petra Vávrová*

In 2021, the project focused on supplementing the Hanwell system for monitoring climatic parameters and on the modification of the system in the newly reconstructed depositories of the NL CR, specifically in the southern area of the Central Depository in Hostivař. The results of the project – climatic condition monitoring – are already being used not only for the purposes of protection and the improved quality and efficacy of the care for book collections in the form of so-called preventative conservation, but also for collection administrators or building administrators, who can note any deviations from the norm, malfunctions in the technical equipment or natural disasters operatively and in real-time and immediately respond to the arisen situation (the data from the sensors is also accessible remotely). It is not possible to ascertain the real values and to secure the long-term stability of the climatic parameters and the depositories, especially the temperature and relative humidity, without the long-term monitoring of the climatic parameters. The stability of the climatic parameters is a fundamental

step in the preventative care for the book collections. A request for the expansion of the existing Hanwell climatic parameter monitoring system installed in the CDH building of the NL CR was issued on the basis of expert consultation and the measurement of the parameters. The newly installed Hanwell wireless measuring system is therefore now fully functional in the newly reconstructed depositories – the southern section. The Hanwell system has been supplemented to include a central station with an external receiver (1) and an RH/T radio frequency detector (9), including the stainless steel detector brackets (9). The joint calibration of the new sensors, the installation of the system's new central station and the newly acquired sensors, the launch of the newly acquired part of the system, the modification of the software that checks the data and statistically evaluates the climatic conditions (the linkup between the old and new systems) have all been performed. This has resulted in flexible supervision of the climatic parameters (the temperature and relative humidity) in selected depositories in the CDH building by the employees in the Book Collection Protection Department (the climatologist, restorers, conservationists and technologists) and the collection and building administration workers in real-time. This supervision can be performed both in the workplace and remotely.

***The digitalisation of the Czech Press Agency's (ČTK) photographic archive***

*Financial support: the Ministry of Culture of the Czech Republic*

*Responsible employee on behalf of the NL CR:*

*Richard Ščerba*

*Project period: 1. 7. 2019 – 31. 12. 2025*

The main objective of this project undertaken in a partnership between the NL CR and the Czech Press Agency involves the preservation of the cultural heritage consisting of the agency's photographic collection which has been stored on traditional analogue materials since its inception. The project secures the digitalisation of the collection and at the same time the increased protection of the original physical media by means of their expert treatment and storage in suitable packaging. The digitalisation and cataloguing of the photographic archive consisting of approximately 7 million images on various types of media, the addition of descriptions to the images and the provision of remote access to the photographic archive in digital form will lay the foundation for the more effective use of the archive, including the provision of access for research purposes at the NL CR. The ability to connect the digitalised photographs with the newspapers digitalised in the NL CR digital library is also anticipated in the foreseeable future.

In 2021, it proved possible to finalise all of the processes in the digitalisation of the black and white originals and this likewise gave rise to an associated methodology. The project will be able to transition from the pilot phase into full realisation, if it proves possible to secure further funding. The anticipated volume of the digitalised photos was not achieved in 2021 as a result of the influence of the restrictions to operations caused by the Covid-19 pandemic. As such, more than 71.1 thousand images (all exclusively black and white photos) from the more than 4.3 thousand original envelopes had been processed by the end of 2021. The sets of digitalised images have been stored in multiple instances in the backup facilities at the NL CR and the Czech Press Agency. The physical media were returned to the archive at the Czech Press Agency after having been expertly treated and placed in new packaging.

## Economic indices, statistics, graphs

### The basic statistical data of the National Library of the CR in 2021

Library items, total	7,574,006
<i>of which manuscripts</i>	21,277
Number of incoming periodical specimens	10,595
Number of library items on open shelves	56,780
New volumes	73,327
Lost volumes	8,782
Number of the NL's specialised databases (other than the Electronic Catalogue)	32
Number of licensed electronic information resources	388,245

Registered users	16,927
Visitors at the library (physical visits)	143,565
<i>of whom visitors to loan departments and reading rooms</i>	63,395
<i>of whom using the internet in the library</i>	23,708
<i>of whom visitors of cultural events</i>	11,062
<i>of whom visitors of educational events</i>	6,197
<i>of whom visitors to other events where the NL CR is not the main organiser</i>	39,203
Visitors to online services from outside the library	18,535,075
Visitors to the library's website	2,318,246
Loans, total	206,466
<i>of which loans of periodicals</i>	12,573



Requests for interlibrary services, total	5,901
<i>of which ordered from abroad</i>	1,420
Online information services (number of questions answered)	16,542
Meetings and consultations for librarians, booksellers and publishers	20,671
Educational events for librarians (seminars, courses, etc.)	488
Cultural events for the public (forums, exhibitions, tours, etc.)	129
Educational events for the public (seminars, courses, etc.)	57
Online seminars, workshops, lectures	99
<i>Participation</i>	1,506
Other events where the library is not the main organiser	118
Number the titles of non-periodical publications issued pursuant to Act no. 37/1995 Coll. as subsequently amended	10
Number of copies (in pcs)	14,890
Number of titles of periodicals issued pursuant to Act no. 46/2000 Coll. as subsequently amended	1
Number of copies (in pcs)	500
Number of electronic document titles issued, including the internet	6 e-publications 4 e-periodicals

Number of study sites*	499
<i>equipped with a computer</i>	57
<i>of which computers with an internet connection</i>	29
<i>equipped with another technical device</i>	20
Number of places in lecture halls and classrooms*	112
<i>of which equipped with a computer</i>	15
Number of places for relaxation and refreshment*	106
Library user area in sq. m	6,682
Number of opening hours per week	80
Library staff (full-time equivalent – FTE)	457.5

\* the number of actual sites and technical equipment were reduced and used in the context of the government's anti-poverty measures

# Financial management

The NL CR achieved a balanced economic result as of 31 December 2021.

Basic data from the Profit and Loss Account (in thousands of CZK)

Item	Main Activity
Total costs	716,835
<i>Operating costs</i>	716,731
<i>of which: material costs</i>	401,964
personnel costs	314,767
Financial costs	104
Income tax	0
Total revenues	716,835
Activity revenue	36,913
Financial revenue	132
Revenue of selected CGIs from transfers	679,790
Income from operations after tax	0

Financing shares to cover the costs of the NL CR from the library's own revenue and from transfer revenue

Item	in Thousands of CZK
Activity revenue and financial revenue	37,045
Revenue of selected CGIs from transfers – MoC provider	673,781
Revenue of selected CGIs from transfers – other providers	6,009
Total revenue	716,835

The chart of account 671 and an overview of the investment expenditure (current as of 31 December 2021, in thousands of CZK)

Activity/Program	Non-Investment Resources	Investment Resources	Source of Financing
<b>I. Provided by the founding entity – MoC</b>	<b>673,344</b>	<b>6,970</b>	<b>MoC</b>
<b>I.1 Operating fund</b>	<b>617,876</b>	<b>1,247</b>	<b>MoC</b>
Special-purpose subsidies	9,027	0	MoC
Cultural activities	424	0	MoC
Library Public Information Services (VISK)	9,793	0	MoC
<b>Total</b>	<b>628,093</b>	<b>1,247</b>	<b>MoC</b>
<b>Institutional Research</b>	<b>11,044</b>	<b>270</b>	<b>MoC</b>
<b>Research Projects funded by the MoC</b>	<b>9,364</b>	<b>0</b>	<b>MoC</b>
<b>Systemic and individual subsidies</b>	<b>524</b>	<b>0</b>	<b>MoC</b>
<b>MoC projects in total</b>	<b>24,318</b>	<b>5,454</b>	<b>MoC</b>
Dealing with the impact of a sewerage accident at the Hostivař depository	8,718	0	MoC
The transfer of the book collections to the reconstructed depositories and the rental of provisional premises	15,600	0	MoC
The reconstruction of the road at the Central Depository premises	0	4,334	MoC
The new depository in Hostivař	0	885	MoC
Preventative protection against unfavourable environmental influences	0	234	MoC
<b>Projects funded through other institutions</b>	<b>6,009</b>	<b>0</b>	
<b>Revenue of selected CGIs from transfers + other providers</b>	<b>679,353</b>	<b>0</b>	
<b>E-Library – tax refund</b>	<b>-7</b>	<b>0</b>	
<b>Revenue of selected CGIs from transfers</b>	<b>19</b>	<b>0</b>	

### Other transfer providers

The NL CR was actively involved in a number of projects funded from a program of the Ministry of Education and the Academy of Sciences of the CR as the main investigator/researcher or partner. They particularly concerned projects in research, development and innovation.

### Binding indicators

**Contributions to operating costs and special-purpose grants** provided during 2021 were used in compliance with the purpose for which they were granted. Separate records were kept to this end (analytical accounts, cost centres).

### Payments for depreciation and buildings

The amount of 41,590 thousand CZK was transferred to the revenue account of the Ministry of Culture as of 31 December 2021. The liability determined under the approved 2021 budget schedule of the National Library was therefore settled on time.

### Payments from the proceeds for the sale of any state-owned intangible assets

The NL CR did not sell any real estate in 2021 and as such was not subject to a levy on the earnings from any such sale.

### Conditional indicator to use the contribution to operating costs

The contribution to operating costs was allocated at an amount of **9,027 thousand CZK** to cover the material costs for the performance of those statutory activities that were previously financed in the form of a special-purpose grant from the Ministry of Culture program for the *Library Public Information Service*; of that, 776 thousand CZK were provided for other personnel costs. The funds for other activities were drawn down in full.

### The use of the funds

The Asset Reproduction Fund was budgeted as a supplementary source of financing for repairs, maintenance and the acquisition of low-value property at the amount of 35,800 thousand CZK. The amount of 22,964 thousand CZK was used. The funds from the Remuneration Fund were used to pay the costs for exceeding the wage cost limit at an amount of 762 thousand CZK. The Reserve Fund was not used.

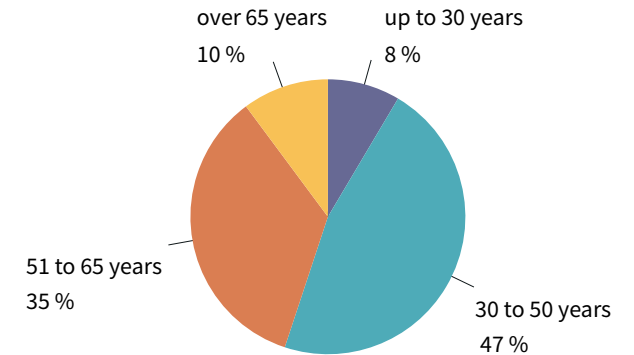
Capital expenditure was at a total of 14,097,000 CZK.

The converted limit for staff at the NK CR in 2021 was originally set at 462. This indicator was subsequently changed to 461.70 during the course of 2021 on the basis of a budgetary modification.

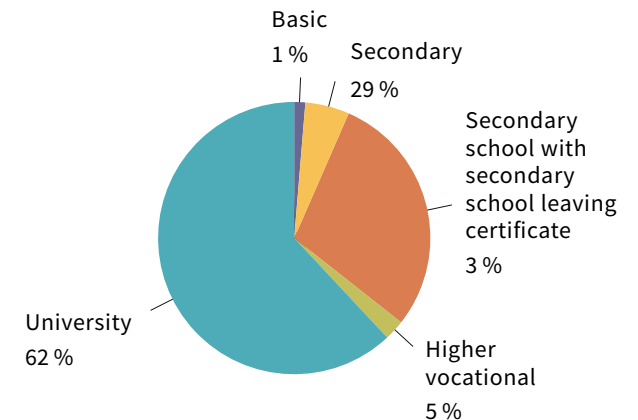
The actual converted number of staff for 2021 amounted to 457.5. The stated value also includes staff, whose wage costs were covered from special-purpose funds designated for projects. The average monthly gross wage amounted to 39,487 CZK.

## Personnel data

### Breakdown of employees by age



### Breakdown of employees by educational attainment



# Acquisition, bibliography and cataloguing division

## The statistics from domestic non-periodical production in 2021

The Annual Report on non-periodical publications compiled by the NL CR is required for the official statistical reporting of the Czech Republic. It is sent to the Ministry of Culture of the CR, which submits it to the Czech Statistical Office. The data presented represent the book production of the Czech Republic also abroad; they have been adopted by EUROSTAT as well as UNESCO.

The tables of the report inform on non-periodical publications issued in the Czech Republic. The data have been processed according to the prescribed methodology, namely on the basis of legal deposit copies acquired by the National Library in 2018.

Table I  
Titles of non-periodical publications by subject

Table II  
Non-periodical publications by language of publication

Table III  
Non-periodical publications – translations from other languages

## I. Titles of non-periodical publications by subject

Subject Group		Total Number of Titles			First Edition Subtotals		
		Books	Pamphlets	Total	Books	Pamphlets	Total
1.	Generalities	404	268	672	381	252	633
2.	Philosophy, psychology	337	13	350	282	12	294
3.	Religion, theology	342	54	396	297	50	347
4.	Sociology, statistics	199	38	237	189	38	227
5.	Politics, economics	303	49	352	264	48	312
6.	Law, public administration, social relief and welfare, insurance	574	38	612	473	37	510
7.	Military art and science	134	12	146	125	10	135
8.	Education, teacher-training, leisure	702	313	1,015	537	280	817
9.	Trade, communication, transport, tourism	100	13	113	87	13	100
10.	Ethnography, cultural anthropology (customs, folklore, mores, tradition)	56	7	63	54	7	61
11.	Philology, languages, linguistics	204	11	215	167	11	178
12.	Mathematics	86	10	96	67	10	77
13.	Natural sciences	322	102	424	272	100	372
14.	Medical sciences, public health	412	69	481	344	64	408
15.	Engineering, technology, industries, trades and crafts	225	75	300	201	75	276

Subject Group		Total Number of Titles			First Edition Subtotals		
		Books	Pamphlets	Total	Books	Pamphlets	Total
16.	Agriculture, forestry, stockbreeding, hunting and fisheries	275	93	368	244	87	331
17	Domestic science	191	7	198	162	7	169
18	Management, administration and organization	122	19	141	111	19	130
19	Physical planning, town and country planning, architecture	181	34	215	173	32	205
20	Plastic and graphic arts, photography	438	103	541	418	101	519
21	Music, performing arts, theatre, film and cinema	195	23	218	184	23	207
22	Games and sports	213	34	247	201	32	233
23	a) History of literature and literary criticism	141	6	147	134	6	140
	b) Literary texts	4,508	659	5,167	3,606	592	4,198
24	Geography	221	21	242	203	16	219
25	History, biography	1,102	76	1,178	1,012	71	1,083
Total		11,987	2,147	14,134	10,188	1,993	12,181
of which	School textbooks	306	69	375	179	58	237
	Children's books	1,241	883	2,124	986	781	1,767
	University textbooks	279	10	289	206	10	216
		25,800	5,256	31,056	21,747	4,835	26,582

II. Non-periodical publications by language of publication

Language of Publication	Number of Titles
<b>a</b>	<b>2</b>
Total	14,134
Czech	12,272
Czech and other languages	753
English	492
Slovak	313
German	49
Russian	35
Polish	22
Spanish	22
Italian	14
French	8
Ukrainian	8
Hungarian	6
Esperanto	5
Croatian	4
Chinese	3
Romanian	3
Filipino	2
Belarusian	1
Bosnian	1
Hindi	1
Japanese	1
Portuguese	1
Swedish	1
Multilingual (not including Czech)	117



III. Non-periodical publications – translations from other languages

Source Language	Number of Titles
<b>a</b>	<b>2</b>
Translations – total	5,246
English	2,668
German	806
French	364
Slovak	335
Spanish	184
Italian	112
Russian	103
Polish	93
Japanese	74
Swedish	69
Norwegian	31
Finnish	17
Modern and Medieval Latin	17
Dutch	16
Ukrainian	13
Danish	12
Lithuanian	12
Icelandic	11
Chinese	10
New Hebrew (ivrit)	10
Croatian	10

Source Language	Number of Titles
<b>a</b>	<b>2</b>
Portuguese	10
Classical Greek	8
Classical Latin	7
Non-specified	7
Esperanto	5
Hungarian	5
Modern Greek	5
Slovenian	4
Modern Arabic	3
Korean	3
Serbian	3
Classical Arabic	2
Bulgarian	2
Romani	2
Romanian	2
Belarusian	1
Georgian	1
Old Hebrew	1
Hindi	1
Irish	1
Catalan	1
Latvian	1

Source Language	Number of Titles
<b>a</b>	<b>2</b>
Other African languages	1
Other Asian languages	1
Other ancient languages	1
Persian	1
Sanskrit	1
Turkish	1
Uzbek	1
Vietnamese	1
Multiple languages	196

## Foreign acquisitions in 2021

This does not include acquisitions of the Slavonic Library and of the Librarianship Institute.

### A. Non-periodical publications

<b>Total</b>		<b>7,967 library items</b>
Printed documents		6,794
of which	Exchange	2,152 (27.02 %)
	Donations	1,326 (16.64 %)
	Purchase	3,316 (41.63 %)
Non-printed documents		1,173
of which	Microforms	1,159 (14.54 %)
	CD-ROMs	9 (0.11 %)
	Electronic source	5 (0.06 %)

### Analysis of Total Acquisitions by Country

	Country	Exchange	Donations	Purchase	Non-Printed Documents*	Total (l. i.)
1	USA	287	75	1,042	1,161	2,565
2	Germany	208	355	443	1	1,007
3	Great Britain	6	52	481	3	542
4	Russia	321	28	66	0	415
5	Slovakia	45	281	2	5	333
6	France	85	40	169	1	295
7	Spain	58	18	205	0	281

	Country	Exchange	Donations	Purchase	Non-Printed Documents*	Total (l. i.)
8	Romania	158	11	86	0	255
9	Poland	152	62	25	0	239
10	Italy	7	26	185	0	218
11	Switzerland	0	18	162	0	180
12	Austria	32	94	21	1	148
13	Chinese	109	17	2	0	128
14	Belarus	119	1	1	0	121
15	Serbia	1,007	12	0	1	120
16	Hungaria	57	20	42	0	119
17	Croatia	78	11	24	0	113
18	The Netherlands	0	13	85	0	98
19	Belgium	1	8	76	0	85
20	Ukraine	72	10	2	0	84
21	Japan	64	9	0	0	73
22	Portugal	1	0	50	0	51
23	Azerbaijan	41	2	0	0	43
24	Moldova	39	0	0	0	39
	Sweden	32	3	4	0	39
25	Bulgaria	18	19	0	0	37
26	Canada	0	2	30	0	32
27	Finland	28	3	0	0	31
28	Indie	0	21	7	0	28
29	Singapore	0	1	21	0	22
30	Brazil	0	0	19	0	19
	Slovenia	8	11	0	0	19

	Country	Exchange	Donations	Purchase	Non-Printed Documents*)	Total (l. i.)
31	Latvia	3	13	0	0	16
32	Macedonia	6	8	0	0	14
33	Denmark	0	8	3	0	11
	Turkey	0	11	0	0	11
34	Egypt	0	6	4	0	10
35	Lithuania	8	1	0	0	9
	Peru	0	0	9	0	9
36	South Korea	0	7	1	0	8
37	Argentina	0	0	7	0	7
	Mexico	0	0	7	0	7
38	Philippines	0	5	1	0	6
	Lebanon	0	6	0	0	6
39	Columbia	0	2	3	0	5
40	Chile	0	0	4	0	4
	Ireland	0	0	4	0	4
	Norway	0	3	1	0	4
41	Bosnia and Herzegovina	0	3	0	0	3
	Ethiopia	0	3	0	0	3
	Israel	0	3	0	0	3
	South Afrika	0	0	3	0	3
	Kazakhstan	0	3	0	0	3
	Greece	0	3	0	0	3
	Syria	0	3	0	0	3
	Vatican City	0	0	3	0	3
	Vietnam	0	3	0	0	3

	Country	Exchange	Donations	Purchase	Non-Printed Documents*)	Total (l. i.)
42	Australia	0	0	2	0	2
	Bolivia	0	0	2	0	2
	Montenegro	1	1	0	0	2
	Georgia	0	2	0	0	2
	Luxembourg	0	0	2	0	2
	Pakistan	0	0	2	0	2
	Paraguay	0	0	2	0	2
	Saudi Arabia	0	2	0	0	2
	Thailand	0	1	1	0	2
	43	Afghanistan	0	1	0	0
Albania		0	1	0	0	1
Ecuador		0	0	1	0	1
Estonia		0	1	0	0	1
Qatar		0	0	1	0	1
Malaysia		0	1	0	0	1
Malta		0	0	1	0	1
Mauritius		0	1	0	0	1
New Zealand		0	0	1	0	1
Reunion		0	0	1	0	1
United Arab Emirates		0	1	0	0	1
Taiwan		1	0	0	0	1
	<b>Total</b>	<b>2,152</b>	<b>1,326</b>	<b>3,316</b>	<b>1,173</b>	<b>7,967</b>
	<b>% of the total acquisitions</b>	<b>27.02</b>	<b>16.64</b>	<b>41.63</b>	<b>14.71</b>	<b>100.00</b>

\*) incl. CD-ROMs, microforms, video and audio recordings

### Analysis of Total Acquisitions by Subject

	Subject Group	Exchange	Donations	Purchase	Non-Printed Documents*)	Total (l. i.)
1	Generalities	240	72	351	30	693
2	Philosophy, psychology	48	58	102	0	208
3	Religion, theology	46	85	172	0	303
4	Sociology, statistics	104	44	147	2	297
5	Politics, economics	229	63	338	140	770
6	Law, public administration, insurance	140	52	61	406	659
7	Military art and science	33	6	51	167	257
8	Education, teacher-training, leisure	25	34	26	42	127
9	Trade, communication, transport, tourism	16	6	5	61	88
10	Ethnography, cultural anthropology	85	19	46	26	176
11	Philology, languages, linguistics	131	65	78	0	274
12	Mathematics	12	2	55	0	69
13	Natural sciences	45	34	138	54	271
14	Medical sciences, public health	28	36	71	92	227
15	Engineering, technology, industries, crafts	13	15	28	50	106
16	Agriculture, forestry	4	10	11	32	57
17	Domestic science	3	14	9	8	34
18	Management, administration and organization	11	8	9	30	58

	Subject Group	Exchange	Donations	Purchase	Non-Printed Documents*)	Total (l. i.)
19	Town and country planning, architecture	30	24	110	17	181
20	Plastic and graphic arts, photography	115	76	188	4	383
21	Music, performing arts, theatre, film and cinema	82	93	174	6	355
22	Games and sports	2	0	4	3	9
23	Literary studies	172	52	205	0	429
24	Geography	25	35	21	0	81
25	History, biography	425	175	869	1	1,470
26	Literary texts	88	248	47	2	385
	<b>Total</b>	<b>2,152</b>	<b>1,326</b>	<b>3,316</b>	<b>1,173</b>	<b>7,967</b>

\*) incl. CD-ROMs, microforms, video and audio recordings

### B. Periodicals

Total		<b>297 titles</b>
of which	Exchange	67 (22.50 %)
	Donations	16 (5.50 %)
	Purchase	214 (72.00 %)

# The statistical indices of the services

In addition to the in-person use of the physical collections, a regular part of the fundamental services also involves the provision of access to document content online and via digital libraries. In 2021, we once again explicitly felt the significance of the resources and services that are available in the virtual environment, which in many aspects overshadowed the use of the library as a physical service and space. An evaluation of the statistical indicators pertaining to services in 2021 shows that the operations of the NL CR as a physical space for the public continued to be influenced by the Covid-19 pandemic throughout the year. After the government restrictions had finally been relaxed, there was a cyber-attack at the very moment when the library was getting ready to fully reopen after a number of months. The consequences of this attack were reflected in the conditions for the provision of the library's services over a period of several months. On the other hand, the positive aspects of 2021 include the fact that technology enabled us to provide our users with new services which improved the library user experience for them.

Of the originally planned 278-day operating period in 2021, the library was able to be open to the public, at least partially, for 210 days, i.e. 75.5% of the originally anticipated number of operating days. Of that, the Main Hall was the only department open in various modes for 45 days. On 12 of those days, this involved an issuing window for home loans from the NL CR collection and also for the partial provision of interlibrary services – the issue of both ordered copies and ordered book loans which were able to be provided for home loans either as usual or with the exceptional consent of the supplying library. On the remaining 33 days when the Main Hall was the only department accessible to the public, it was not only possible to make home loans from the NL CR collection, but also to register, while interlibrary services and the issue of ordered copies from the NL CR collection were also temporarily provided in the Hall. Readers and visitors were also able to use the individual reading rooms for a further 165 days (59% of the number of anticipated operating days in 2021) from 2. 6. 2021.

Only online services were provided at the beginning of the year due to the measures introduced against the epidemic. Readers were able to use the issuing window at the turn of February and March (18. 2. – 5. 3. ), while the NL CR was subsequently only accessible online until 12 April. The Main Hall renewed its operations from 13 April after the relaxation of the government's anti-epidemic measures and the reading rooms were also prepared for use at the extent stipulated by the government regulations as of 19 May. However, the cyber-attack in

the middle of May and the time-consuming resolution of its consequences had a significant effect on the library's operations. The library gradually returned to its more or less regular operations, as far as the provision of in-person services is concerned, throughout September and October.

As in the previous year, limits introduced on the basis of the requirement to adhere to the government's anti-epidemic measures (i.e. limits to the number of places in each reading room in association with the adherence to social distancing and also limits designated by the permitted number of users and the individual spaces) were typical for 2021. The library remained open throughout the summer months without its usual two-week closure. All of the data pertaining to the in-person visitor numbers or the number of physical book loans, but also to the growth in the use of digital services and resources has to be viewed while keeping the aforementioned facts in mind.

The total in-person visitor numbers at the library fell in 2021 in comparison with the previous, also Covid-impacted, year by 31% (see the Summary of Provided Services table... and graphs 3 and 8). We can certainly ascribe this further fall in reader visits not only to the aforementioned consequences of the pandemic, but also to the impact of the cyber-attack. The Main Hall had to be closed again for several days as a result of the cyber-attack and it only proved possible to restore its operations on 24 May. The prepared reopening of the reading rooms was deferred. The first reading rooms



were not able to be opened up to readers until the beginning of June and even then only for the study of physical documents. All of the reading rooms were able to gradually be opened by the beginning of July. In addition to the reduced reading room capacity associated with the anti-epidemic measures, the reader numbers were also most certainly not helped by the fact that the computer equipment available to readers in the individual reading rooms took longer to restore after the cyber-attack. Unlike the state of affairs prior to the attack, it was necessary to select a “single-purpose computer” solution for the reader computers, which once again influenced the frequency of their use by readers. Last but not least, it is also necessary to mention the fact that readers registered at the NL CR had remote access to the entire contents of the NDL-COVID digital library until 30 June, i.e. the need to study physical documents directly at the library was thus reduced.

In addition to the opening of the reading rooms on 2 June, the dispatch of collections from the depositories in Hostivař, which had been inaccessible for a number of years in association with their revitalisation, was reinstated. More than 9000 volumes were dispatched from these depositories by the end of 2021.

The Main Hall continues to be the most visited reader area in its role as the primary reception centre for users with a recorded total of 36,211 reader visits. This figure represents approximately 70% of the reader volume in 2020 and it also corresponds with the limited nature of the library’s operations in 2021. It is also necessary to

recall that it was only possible to provide some of the services that are otherwise standardly offered at the Main Hall during the period when the issuing window was the only part of the Hall in operation and that all the registered users had their registration and loan periods for any home loans extended throughout the period when the NL CR was closed. The visitor numbers in most of the reading rooms providing basic services fell to just under 70% of the volume for 2020. Part of this fall can logically be associated with the aforementioned limitations (the reduced number of operating days – in the case of the reading rooms, this was a mere 59% of the original plan for 2021, the limited number of reading room and computer places, the limited scope of the services provided due to the impact of the cyber-attack and the impact of the NDL-COVID operations and subsequently the out-of-commerce works included in the NDL). The General Reading Room was the most used reading room. This reading room has the highest number of places (205 places during standard operations, but just 45 places from June as a result of the restrictions, while this was subsequently slightly increased to 50 places when the government’s measures were relaxed in August) and also the longest opening hours – 75 hours a week due to the fact that it proved possible to maintain the reading room’s opening hours without any deviations after the opening in 2021. Of the reading rooms providing basic services, the visitor numbers fell the least in the Scholars’ Reading Room (73% of the volume of 2020) and the Social and Natural Sciences

Reading Room (70%). This can be associated with the need to use literature that has yet to be digitalised when undertaking scientific work or with the restricted number of places in the General Reading Room meaning that any increased visitor numbers overflowed into the Social and Natural Sciences Reading Room. The extremely low visitor numbers at the Reference Centre (47% of the volume for 2020) can be linked with the nature of this reading room, which usually has the largest number of computers during regular operations. As has already been mentioned, it took some time to restore the computers for readers and even then this involved “single-purpose” computers. The Reference Centre was also the last reading room to open within this context at the beginning of July. On the other hand, the visitor numbers at the Music Department Reading Room and the Hostivař Reading Room, which provides access to modern collections that often are unique in the Czech Republic, were above average at approximately 88% and 84% respectively. The visitor numbers to the Slavonic Library, which reached 78% of its volume for 2020, are also high within this context, as too are the numbers for the Library and Information Science Library at 77% (see the Summary of Provided Services table... and graphs 3 and 8).

The number of physical volumes loaned – yet another of the monitored indicators – was slightly above 74% of the 2020 level within the entire NL CR. However, a great deal of volatility can be observed among the individual workplaces providing book loans in 2021

in comparison with the aforementioned average. The number of book loans provided at the Main Hall was more than 78% of the volume from the previous year. A smaller fall was apparent at the Scholars' Reading Room and the Hostivař Reading Room where the book loan numbers reached approximately 82–89% of the volume from 2020. However the figures for 2020 were exceeded by those from the Music Department Reading Room (101%), the Slavonic Library (165%) and the NL CR Archive, the absolute record holder, which made five times as many book loans in 2021 as in the previous year. The reduction in the volume of physical loans can once again be ascribed to the Covid-19 pandemic and the library's complicated operations after the cyber-attack. The opening of the aforementioned NDL-COVID digital library by 30 June 2021 and the subsequent transition to the out-of-commerce-works mode and the change in the habits of library users in general also no doubt had a certain influence on this. Nevertheless, the numbers of book loans have been falling since 2014 and, with the exception of the Slavonic Library, this year's restoration of dispatches from the depositories that were formerly closed while undergoing revitalisation (see the Summary of Provided Services table... and the Basic Services of the NL CR table... and graph 7) has yet to be reflected in the figures. The fall in the number of reader orders (see the Basic Services of the NL CR in Figures... and graphs 4) has been constant since 2014. In the past, this especially reflected the impact of the revitalisation and inaccessibility of the collections, but the Covid-19

pandemic, the development of the provision of access to digitalised documents and a change of lifestyle have all played a role over the last two years. Users have also become accustomed to the comfort represented by the reminders and notifications, which are sent out in their tens of thousands by the automated loan system. The positive resolution of requests in 2021 reached a standardly high level of 99.78%. The data pertaining to new registrations also correlates with the aforementioned development trends. The number of new registrations has been falling in recent years, while the most significant fall was apparent in 2015 (see the Summary of Provided Services table... and the Basic Services of the NL CR in Figures table... and graph 2). It proved impossible to reverse the falling number of registered users in 2021, but it was pleasing that the number only fell by 9% in comparison with 2021. The statistical registration data does not include the "technical" extensions of library cards by the essential period in cases where the cards had lapsed during the period of the enforced closure of the library. As a result, these users also continued to have access to the NDL-COVID digital library during the periods when it was not possible to provide them with access to the physical documents. In-person registration at the NL CR was supplemented with the option of remote registration from September. From October, this was further supplemented with the option of extending the registration's validity online based on the online payment of the registration fee.

Interlibrary services especially cover highly specialised requirements for the provision of book loans and copies in the age of the internet, online subscriber databases and the increasing significance of digital libraries. This usually involves difficult to acquire documents, the acquisition of which is very costly, especially in the case of those documents that have to be acquired from abroad. The data for 2021 confirmed the falling number of requests for both domestic and international interlibrary services (see graph 5), but this still involves the lowest year-on-year fall since 2014. The number of required interlibrary services represents almost 93% of the volume for the previous year, which has to be perceived positively within the context of 2021. The closure of the NL CR also naturally affected the provision of interlibrary services. At least some of the interlibrary services were provided by the Main Hall during the periods when it was only possible to operate the issuing window and the Reference Centre remained closed for technical reasons. A further factor which has probably influenced this trend involves the availability of a wide spectrum of licensed online information sources, which can moreover be browsed using the EBSCO Discovery Service (EDS) MultiBrowser, and the increasing significance of the NDL. Within this context, it is also necessary to mention the increasing price for international interlibrary services which are provided with the financial participation of the readers. The number of printed outputs in the area of reprographic services in 2021 (see the Summary of Provided Services

table... and graph 6) fell to 80% of the level from the previous year. The services for the individual websites operated by the library developed dynamically. The virtual reference service known as *Ptejte se knihovny* [*Ask the library*] continues to be the most used domain that the library operates with more than 1 million hits. The *nkp.cz* domain (see graph 10) also exceeded this visitor level milestone this year. The NDL likewise continued to excel among the websites this year with regard to the number of visited and displayed pages (see graphs 11 and 12).

As has already been mentioned a number of times, the significance of digital libraries is currently growing, especially with regard to content that can also be made remotely accessible to registered users in compliance with the copyright. As such, the trend, which had commenced in 2020 with the opening of the NDL for high schools during the first wave of the Covid-19 pandemic, continued. The exceptional opening up of the entire content of the National Digital Library in the NDL-COVID mode continued until 30 June 2021. This exceptional access was terminated from 1 July 2021 and the appropriate parts of the NDL returned to the out-of-commerce-works mode, where the aforementioned remote access option is of special interest to users.

The out-of-commerce-works mode increased the volume of documents that could be remotely accessed by registered users at the NL CR after they had logged into the system. This will no doubt also influence some users' need to work with physical documents directly

at the library. In total, the NDL registered almost 3.7 million hits and its use grew further in comparison with 2020, namely by 43% (see graph 11).

Electronic information sources (EIS) have long been one of the pivotal areas that most influence users and the public when evaluating the quality of a library's online information services. Standard library services include loans from electronic libraries to the library's own reading devices (especially ProQuest Ebook Central, EBSCO eBook Collection and Springer). The main library and electronic source catalogues are also available via the EBSCO Discovery Service interface. The use of this service has remained at a more or less stable level. In 2021, the statistical indicators recorded 41,904 hits and 55,540 searches, i.e. this involved a return to similar figures to those in 2019. Most of the library visitors use the Wi-Fi internet access in the reading rooms. This network covers the entire main reading and the relaxation areas in the library. The most frequently used access points are the main reading room areas.

The library's standard activities also include educational and cultural activities. The National Library is also a listed building that offers guided tours. The impact of the Covid-19 pandemic continued to affect these activities in 2021, in that they gradually began to be performed in the middle of June and most such activities then took place from September to the end of the year. It proved possible to hold two significant in-person exhibitions in 2021 (*The Lipnice Bible 1421–2021*

and *The Book and the Veil*, which continued until January 2022). All of the in-person exhibitions installed within the various parts of the Clementinum were visited by 3755 people and other readers also viewed the exhibitions in the Clementinum's corridors, which are freely accessible to registered NL CR users. The Signal Festival of Light, which also took place in the Clementinum's courtyards, was able to boast significant visitor numbers of approximately 6000 people. 1054 pupils and students became acquainted with the Clementinum and the library itself through a variety of collective educational events that especially focused on primary and secondary schools. Even though this figure represents less than 47% of the participants in these excursions in 2020, it is interesting that the number of excursions organised for secondary schools at the aforementioned volume more than doubled at the expense of visits from children at primary school. The visitor numbers for events that are organised by other entities at the Clementinum were almost the same as for 2020 (92%). In comparison with the last standard year, i.e. 2019, however, even this interesting visitor statistic represented a mere 23% of the visitor numbers in 2019. A slight drop in visitor numbers caused by the implemented limitations can also be found in the tourist tours of the historical areas in the Clementinum (86.3% of the volume for 2020). On the other hand, we recorded a significantly higher number of participants at the concerts and other events held in the Mirrored Chapel by other entities (178.8% of the volume for 2020).

**An overview of the services provided in loan departments and reading rooms of the National Library of the CR 2021\***

Items Monitored		Main Hall	General Reading Room	Social and Natural Sciences Reading Room	Scholars Reading Room	Reference Centre*	Periodicals Reading Room	Manuscripts and Early Printed Books Reading Room	Music Department Reading Room*	Reading Room in the National Library in Hostivař	Library and Information Science Library	Slavonic Library*	Archives of the NL CR
Registered loans		115,861	36,358	140	17,388	2,227	8,285	678	745	1,807	1,042	21,873	62
of which	home loans	113,171	0	0	0	793	272	0	39	0	911	18,047	14
	in-house use of documents	2,690	36,358	140	17,388	1,434	8,013	678	706	1,807	131	3,826	48
Registered users		13,948				1,879						1,095	5
of which	new library cards	2,264										149	
Library usage		36,211	12,838	3,141	2,150	2,429	1,512	221	502	260	332	3,787	12
Users Requests		77,674											
of which	fulfilled	77,502											
Interlibrary-service requests						5,532						369	
of which	ordered abroad					1,419						1	
Overdue notices sent through the lawyer's office		14										1	
Photocopying and printing for users		19,675		19,007		20,635	1,949			0		2,114	

\* NK services are provided under a limited regime determined by government anti-epidemic measures.

\*\* The service is provided in temporary space and in non-standard conditions.

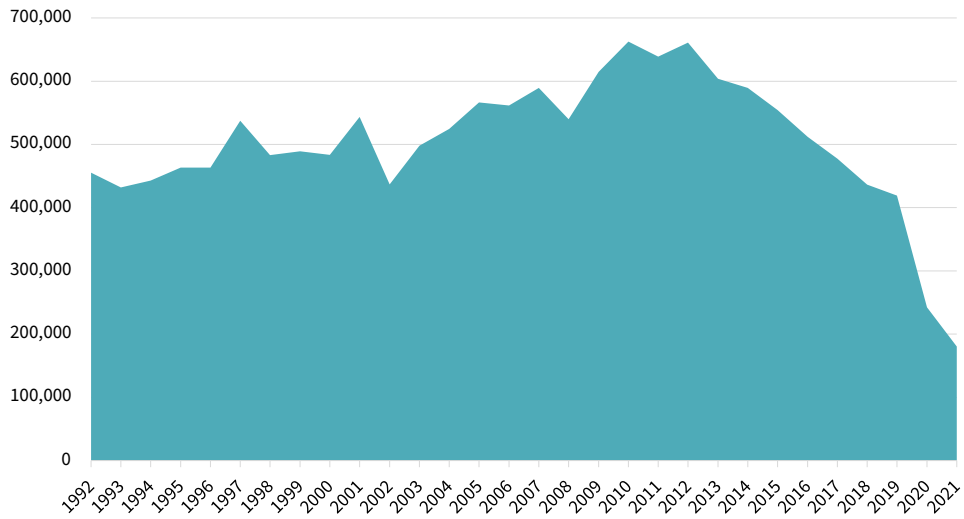
### The basic NL CR services in figures in 2001–2021\*

Items monitored	2001–2010 average		2011		2012		2013		2014		2015	
	number	index	number	index	number	index	number	index	number	index	number	index
Registered loans	553,764	100	638,731	115	661,102	119	603,926	109	589,323	106	554,506	100
Registered users	35,324	100	29,130	82	29,799	84	28,975	82	28,388	80	26,897	76
Library visits (visitors of the Main Hall and main reading rooms)	435,476	100	344,362	79	350,179	80	322,987	74	316,529	73	294,118	68
Requests submitted by users	290,720	100	322,766	111	343,971	118	295,804	102	316,044	109	283,068	97
of which fulfilled	278,075	100	317,151	114	341,394	123	293,403	106	313,910	113	281,632	101
Request success rate in percentage	95.65 %		98.26 %		99.25 %		99.19 %		99.32 %		99.49 %	
Interlibrary-service requests	24,447	100	18,040	74	16,582	68	15,882	65	15,671	64	15,081	62
of which ordered abroad	6,987	100	4,784	68	4,622	66	4,541	65	4,612	66	4,552	65
Photocopies and print-outs for users	492,546	100	460,736	94	386,132	78	354,532	72	303,696	62	249,12	51

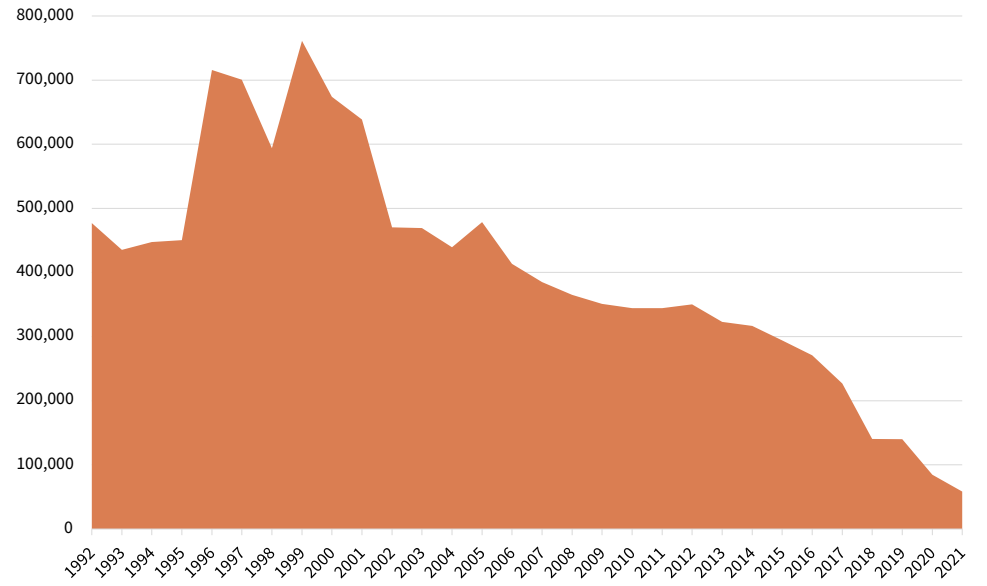
Items monitored	2016		2017		2018		2019		2020		2021	
	number	index	number	index	number	index	number	index	number	index	number	index
Registered loans	512,280	93	477,488	86	436,287	79	419,067	76	242,473	44	180,259	33
Registered users	25,453	72	23,433	66	21,013	59	20,021	57	17,386	49	15,827	45
Library visits (visitors of the Main Hall and main reading rooms)	270,898	62	226,803	52	140,505	32	139,854	32	84,427	19	58,281	13
Requests submitted by users	261,799	90	231,391	80	205,886	71	173,721	60	102,124	35	77,674	27
of which fulfilled	260,866	94	230,340	83	205,103	74	173,174	62	101,783	37	77,502	28
Request success rate in percentage	99.64 %		99.55 %		99.62 %		99.69 %		99.67 %		99.78 %	
Interlibrary-service requests	12,757	52	10,884	45	9,625	39	8,635	35	5,965	24	5,532	23
of which ordered abroad	4,230	61	3,378	48	2,712	39	2,451	35	1,439	21	1,419	20
Photocopies and print-outs for users	203,597	41	168,503	34	127,530	26	147,230	30	76,162	15	61,266	12

\* Basic services include: Main Hall, General Reading Room, Scholars Reading Room, Social and Natural Sciences Reading Room, Reference Centre, Periodicals Reading Room.

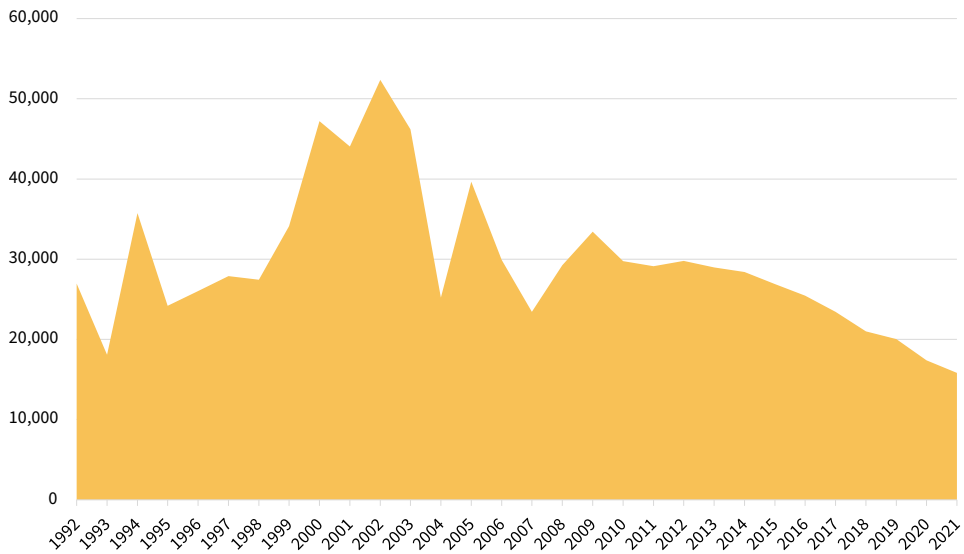
1 Loans



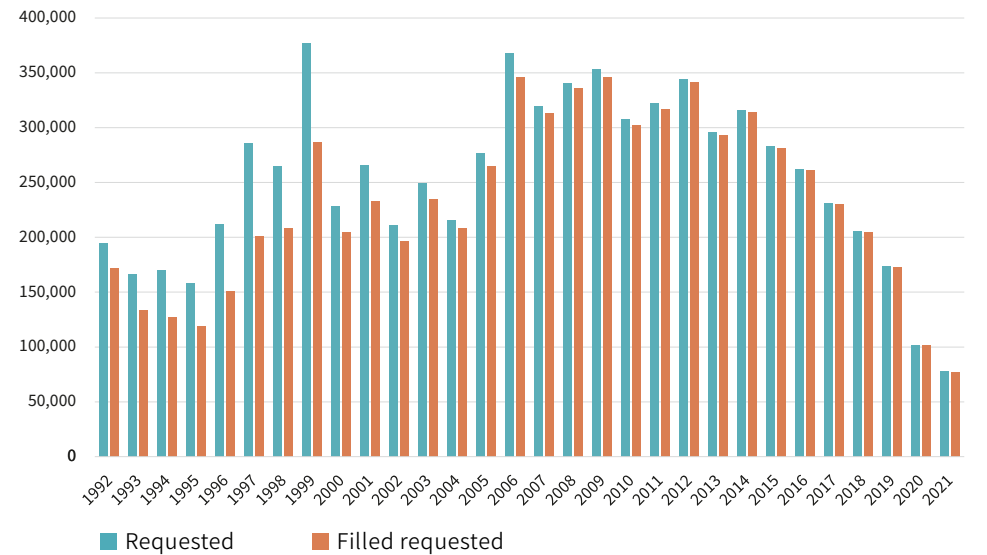
3 Attendance Rate of Loan Departments and Reading Rooms



2 Registered Users



4 Requests

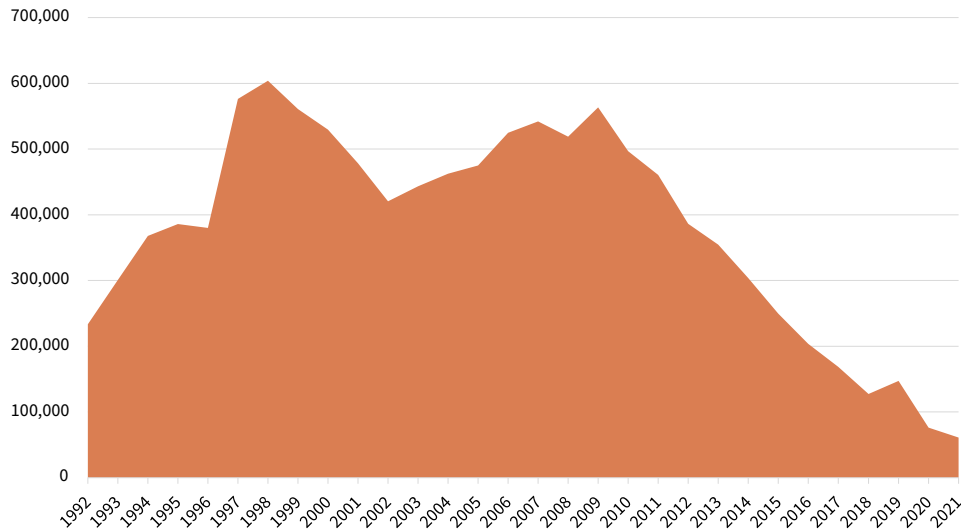




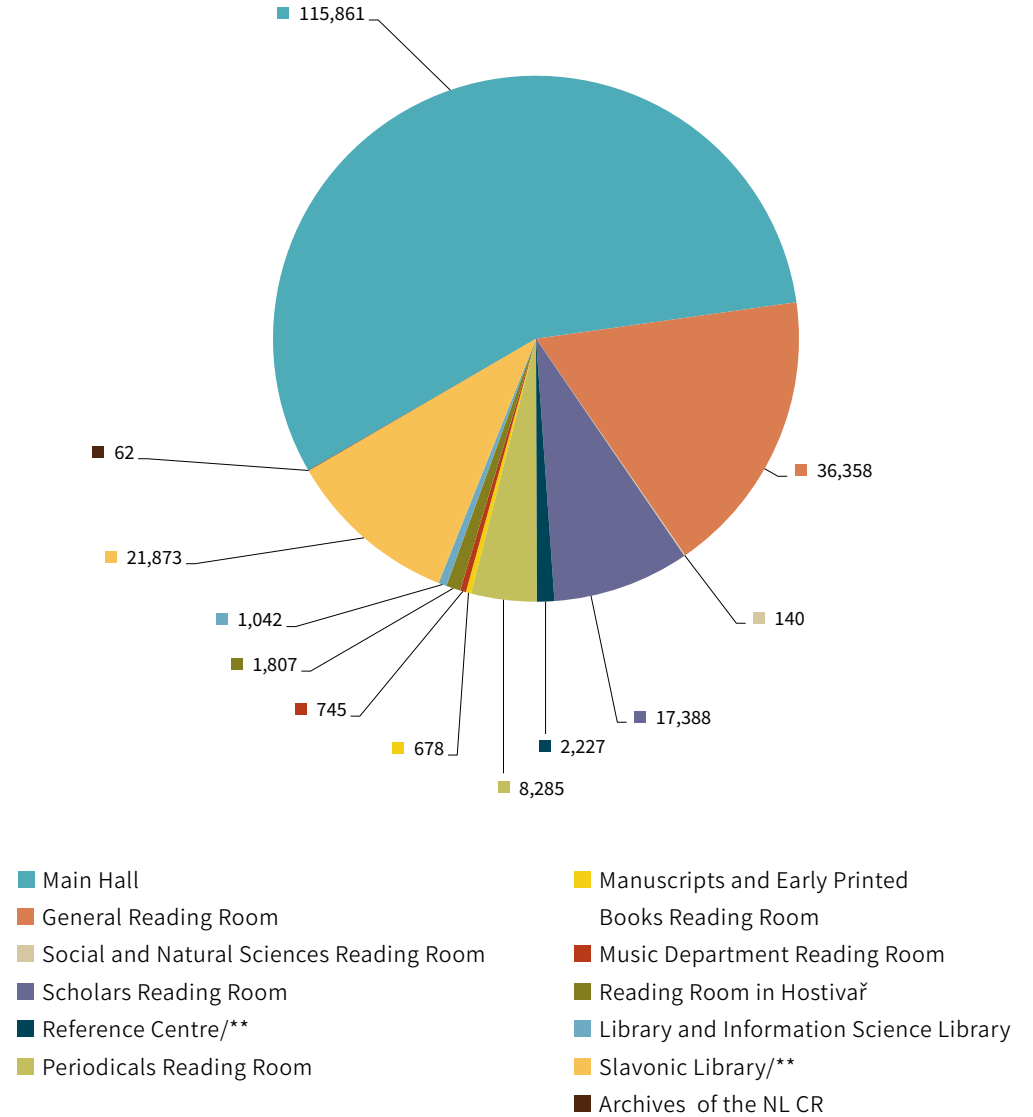
### 5 Interlibrary Services



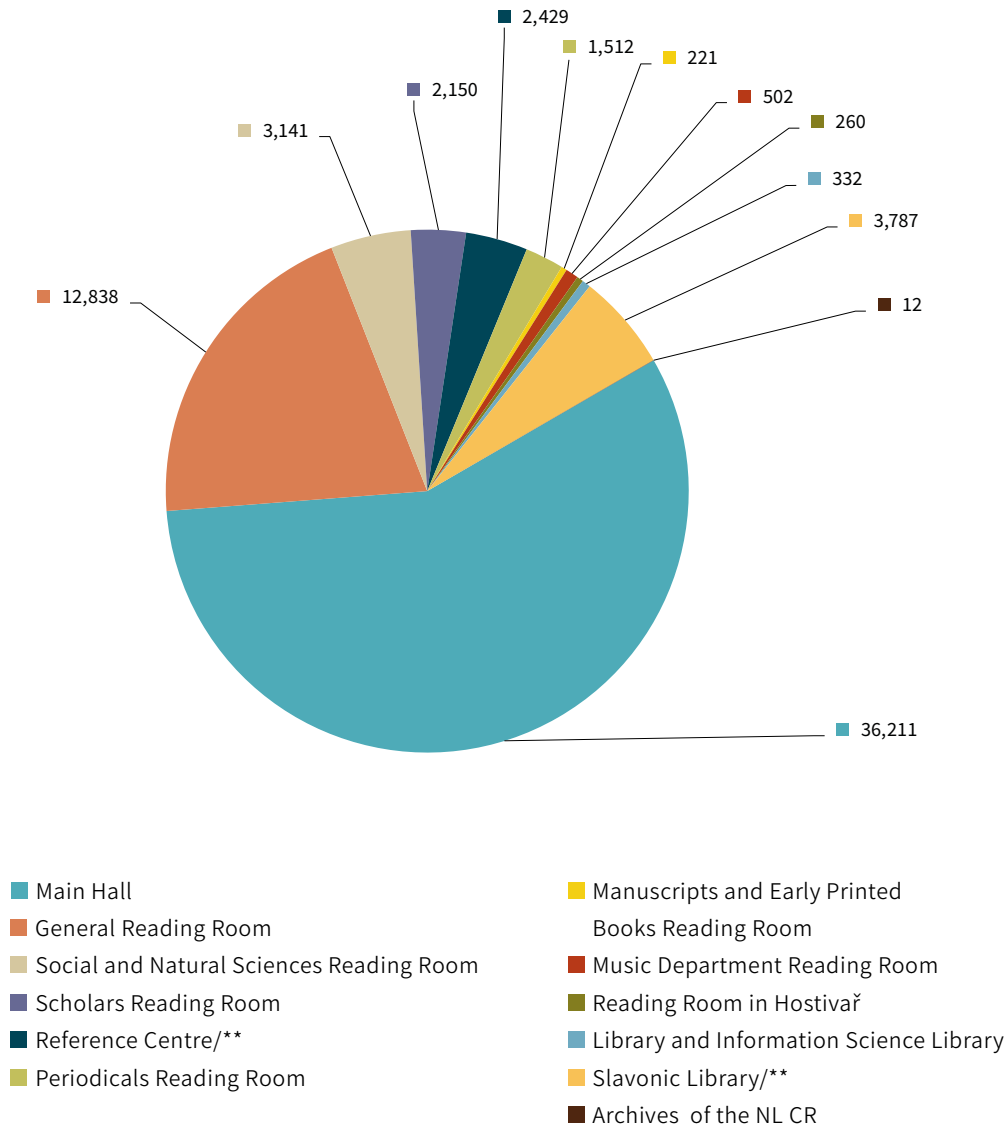
### 6 Photocopying and Printing



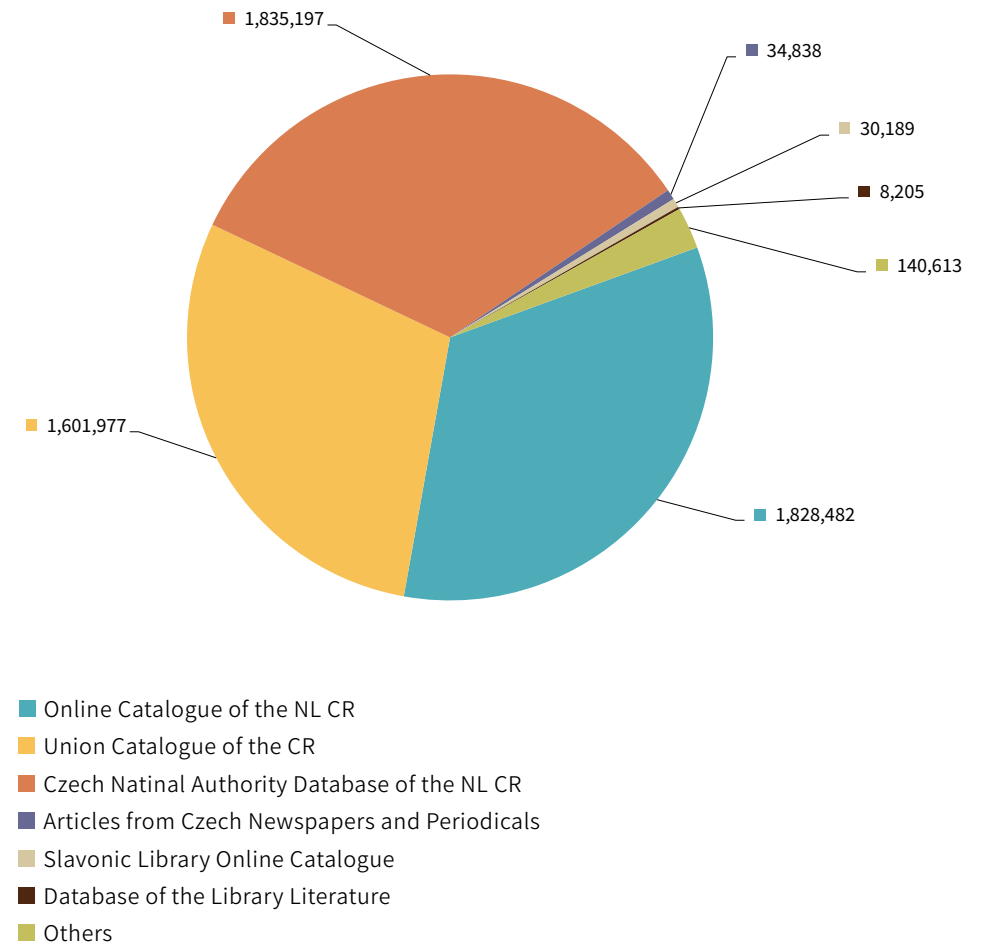
### 7 Registered Loans



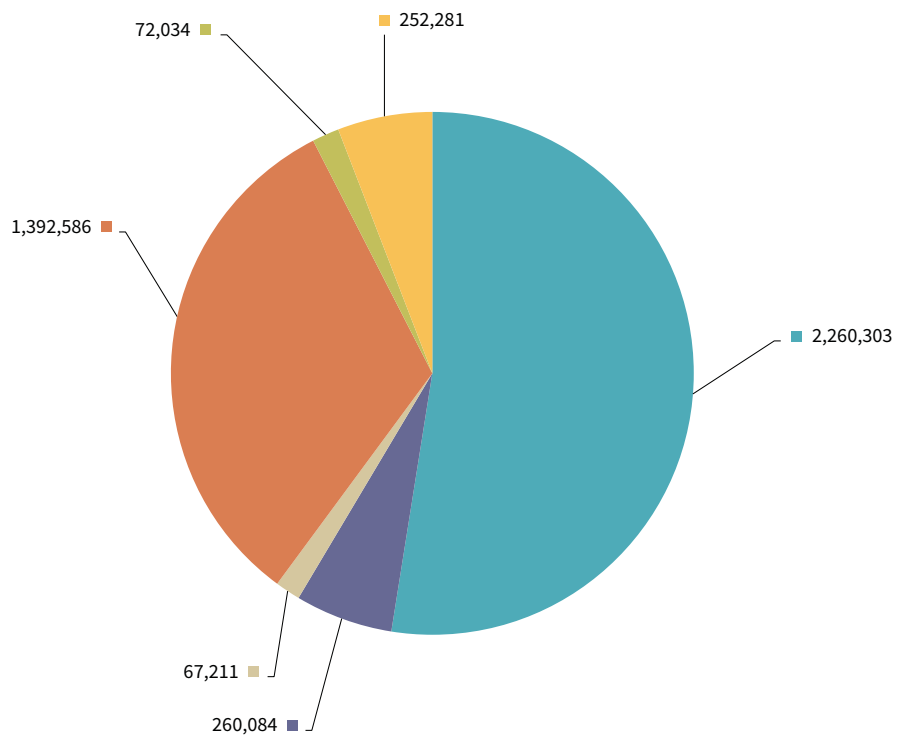
### 8 Library Usage



### 9 Usage of the Catalogues and Databases of the NL CR

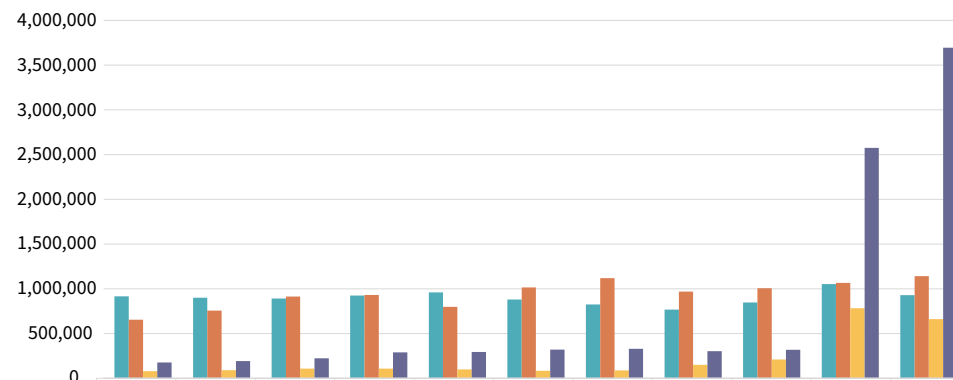


### 10 Website Access Rate



- nkp.cz
- ipk.nkp.cz
- caslin.cz
- ptejteseknihovny.cz
- authority.nkp.cz
- Others

### 11 Visits to the NL Websites and Digital Libraries

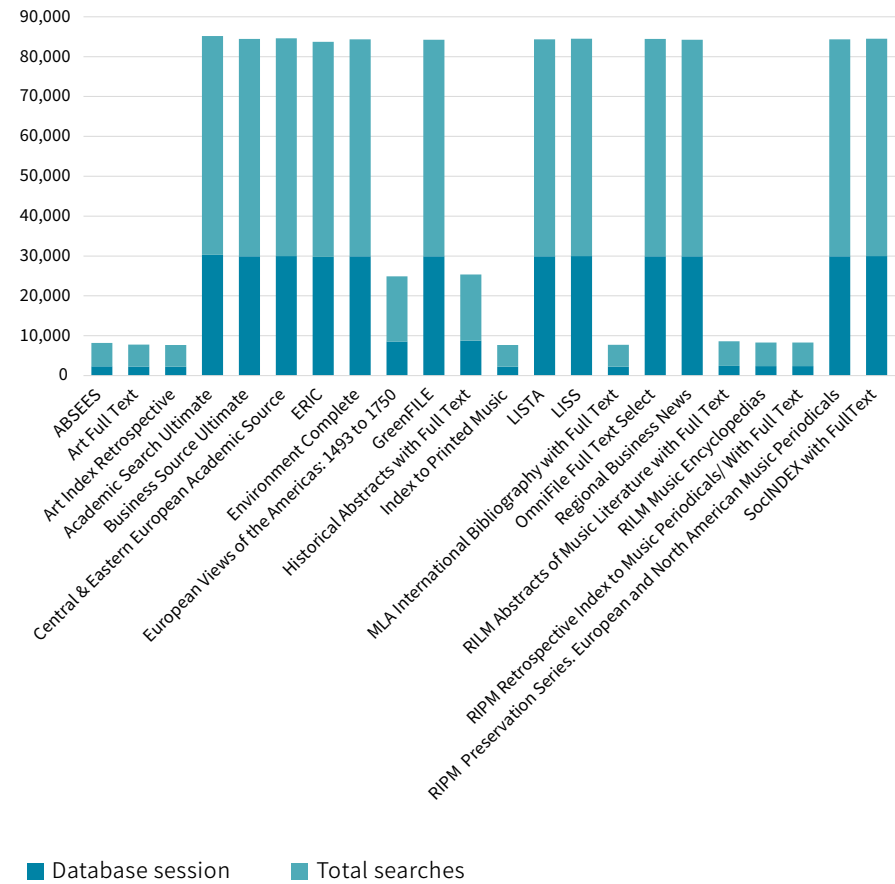


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<span style="color: #008080;">■</span> NL website	915,805	900,529	893,243	925,017	961,309	880,905	825,381	768,646	848,903	1,054,301	930,876
<span style="color: #D2691E;">■</span> Ptejte se knihovny	656,693	757,769	914,047	932,815	799,515	1,015,708	1,119,757	969,471	1,006,351	1,068,129	1,141,446
<span style="color: #FFA500;">■</span> Manuscriptorium	81,190	90,812	110,144	110,093	100,972	85,048	90,349	151,495	210,965	783,059	661,754
<span style="color: #483D8B;">■</span> NDK in Kramerius	177,443	193,429	225,137	290,123	296,151	321,100	329,721	304,718	318,921	2,576,166	3,695,499

### 12 Download/Displayed Pages from NK Websites and Digital Libraries



### 13 Use of Licensed Electronic Information Resources

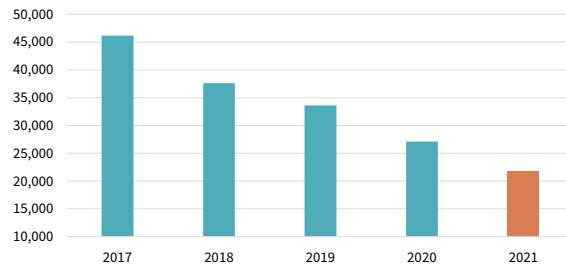


# The Slavonic Library

## Services Provided

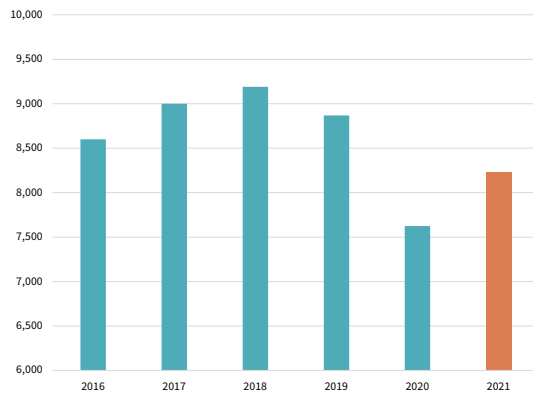
Registered users as of 31 December 2021	1,095
Library usage	3,787
Total number of loans	21,873

## Development of the number of registered loans (2017-2021)



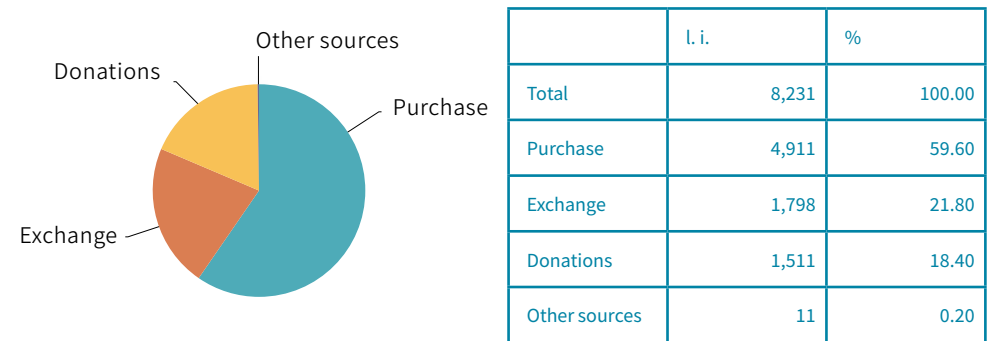
year	l. i.
2017	46,187
2018	37,621
2019	33,618
2020	27,121
2021	21,873

## Collection Acquisitions

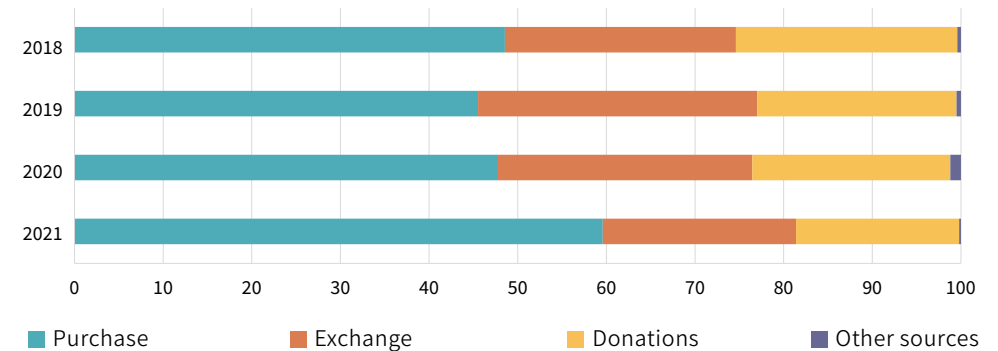


year	l. i.
2016	8,600
2017	9,000
2018	9,191
2019	8,869
2020	7,625
2021	8,231

## Proportion of Individual Acquisition Sources in the Total Acquisitions in 2021



## Acquisition Structure in the Years 2018-2021 (in %)



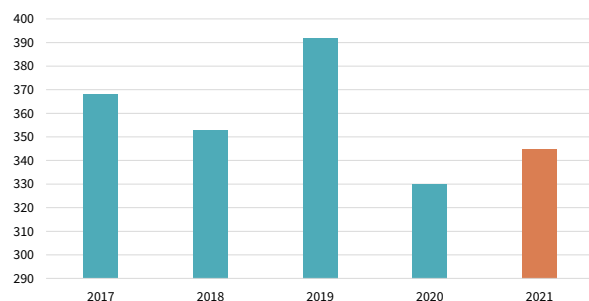
	2018	2019	2020	2021
Purchase	48.55	45.53	47.66	59.60
Exchange	26.06	31.50	28.80	21.80
Donations	24.98	22.47	22.34	18.40
Other sources	0.41	0.50	1.20	0.20

# The Library and Information Science Library

## Services Provided

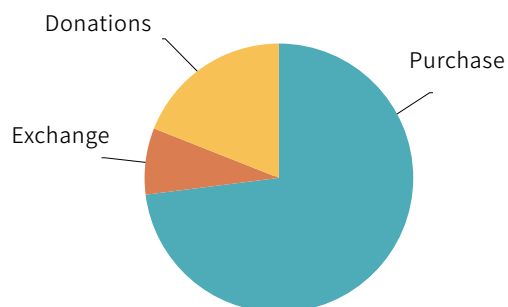
Library usage	332
Total number of loans	1,042

## Collection Acquisitions



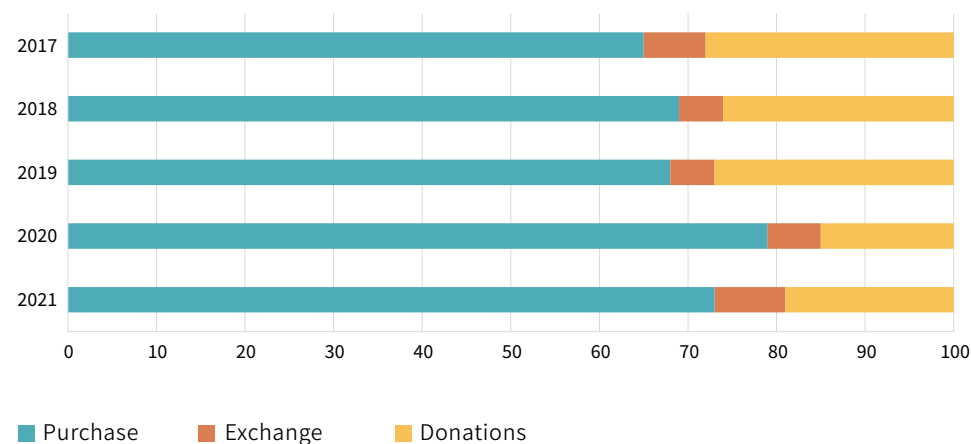
year	l. i.
2017	368
2018	353
2019	392
2020	330
2021	345

## Proportion of Individual Acquisition Sources in the Total Acquisitions in 2021



	l. i.	%
Total	345	100
Purchase	253	73
Exchange	26	8
Donations	66	19

## Acquisition Structure in the Years 2017–2021 (in %)



	2017	2018	2019	2020	2021
Purchase	65	69	68	79	73
Exchange	7	5	5	6	8
Donations	28	26	27	15	19



# The library's cultural, educational and publishing activities

## Important events throughout the year

1 January – 17 February

**The NL CR was closed to the public as part of measures aimed at preventing the spread of pandemic Covid-19;** only online services were provided.

18 February – 5 March

**The NL CR provided absentee borrowing in the form of a borrowing window**

3 March

**The unique discovery of fragments of polyphonic compositions from the repertoire of Notre Dame Cathedral in Paris** in a manuscript stored in the National Library of the Czech Republic.

6 March – 12 April

**The NL CR was closed to the public;** only online services were provided.

13 Apr – 18 May

**The Services Hall opened at the NL CR** for reader registration, home loans, including those through the interlibrary loan service, and copy checkout; the NL CR began accepting payments via payment terminals from 13 Apr.

1 May

**Tomáš Foltýn**, the current Director of the Funds Management Department at the National Library of the Czech Republic, **was appointed the new Director General of the National Library of the Czech Republic by the Minister of Culture Lubomír Zaorálek following a selection procedure.**

7 May

**A book return box was installed** at the foot of the Astronomical Tower in the Clementinum courtyard

17 May

**The Award Ceremony for the Jiří Orten Prize in the Clementinum's Mirrored Chapel**

18 May – 23 May

**The NL CR was closed to the public due to a cyber-attack;** remote access to the NDL and the licensed databases was restored from 19 May

24 May

**The Services Hall reopened after the cyber-attack**

2 June

**The study rooms reopened after the cyber-attack**, with the exception of the Social and Natural Sciences Study Room (opened on 10 June) and the Reference Centre (opened on 2 July), for the study of physical documents only; the dispatch of long unavailable documents from the Hostivař depository was resumed. Reading computers and self-service reprographic services remained out of operation.

2 June

**A seminar on digitisation (not only) for regional libraries**

24 June

**A presentation on the digitisation project of the CTK Photo Archive** implemented in cooperation with the Czech Press Office and the National Library of the Czech Republic.

24 June – 25 June

**A webinar of the Association of Czech Bookbinders**

1 July  
**The transition to NDL-OOCW mode, the operations of NDL-COVID were terminated on 30 June;** the restoration of the computer stations for readers at the National Library of the Czech Republic continued until September.

26–30 July  
**The IAML 2021 International Congress online**

14 September  
**The launch of remote registration for readers** using signature verification at CzechPOINT and payment via the payment gateway.

15 September  
**The Award Ceremony for the Rudolf Medek Prize 2021**  
The award was presented to the historian and comedian František Hýbl and the theatre and film director, actor and presenter Jiří Havelka. The two award winners are united primarily by the case of the so-called massacre at the Swedish Chance near Přerov in June 1945, their research and their exemplary efforts to bring it to wider social awareness.

10 October  
**Lesya Ukrainka – 150 years old**  
A concert dedicated to the 150<sup>th</sup> anniversary of the birth of Ukrainian poet and writer, Lesya Ukrainka.

14 October  
**Library of the Year 2021**  
The National Library of the Czech Republic received a special award in the category of significant achievements in the field of public and library services for its Making Digital Libraries Accessible in the time of the Covid-19 Pandemic project.

14 October – 17 October  
**The SIGNAL Festival of Light at the Clementinum**

20 October  
**The launch of online registration renewal with the online payment gateway**

20 October – 21 October  
**Regional Library Functions 2021**  
A national seminar organized by the Association of Libraries of the Czech Republic in cooperation with the NL CR.

21 October  
**A literary commemorative evening on the occasion of the 80<sup>th</sup> anniversary of the birth of Ukrainian poet and diplomat and the first ambassador of Ukraine in Prague, Roman Lubkivsky.**

10 November  
**The Open Data in Librarianship webinar**

11 November  
**Fyodor Dostoyevsky 1821 – 1881 – 2021**  
A seminar held on the occasion of the 200<sup>th</sup> anniversary of Dostoevsky's birth.

18 November  
**A seminar on digitisation (not only) for regional libraries** held under the auspices of SDRUK IT and co-organised by the National Library of the Czech Republic.

25 November  
**Signs of the Unknown – Conversations on Spirituality**  
The launch of the book by Jan Němec and Petr Vizina with the participation of the poet and psychotherapist, Adam Borzic.

30 November – 1 December  
**Archives, Libraries, Museums in the Digital World 2021**

14 December  
**Sustainability in Libraries 2021**  
An international online conference co-organised by the National Library of the Czech Republic in cooperation with SKIP.

## REGULAR EVENTS HELD AT THE CLEMENTINUM

### From the Treasures of Clementinum.

#### A lecture series

This regular lecture series of the Department of Manuscripts and Old Prints, which started in October 2019, was renewed on 7 September and continued on the first Tuesday of every month until the end of 2021. In September, the lecture was combined with the Lipnice Bible 1421–2021: A Shield of Faith in the Turbulent Times exhibition. In October and November, lectures were devoted to documents from the Clementinum's historical collections and were followed by the exhibits of the month. In December, the lecture was combined with the Book and the Veil. 1100 Years Since the Death of Princess and Saint Ludmila exhibition.

7 September

**The Lipnice Bible from 1421** (Lucie Doležalová, Karel Pacovský, Světlana Müllerová, Ondřej Fúsík, Kateřina Voleková)

5 October

**Books by Tycho Brahe and Johan Kepler in the Clementinum Library: comments on the anniversaries of these important astronomers** (Jana Vackářová)

2 November

**The Prague fragments from Notre Dame: the reception of Parisian polyphony in the Czech lands** (Hana Vlhová-Wörner, Jan Ciglbauer)

7 December

**The life of Saint Ludmila: new discoveries – new contexts** (Jakub Izdný)

## Exhibition activities

11 new exhibitions presenting the work of the individual professional departments at the National Library of the Czech Republic, the richness and diversity of its collections, as well as its connection with current cultural events were realised during 2021. Seven exhibitions were held in the corridors of the main library building, one in the Clementinum Gallery and one in the Mirrored Chapel. Some exhibitions were realised outdoors and also prepared for the virtual environment due to the closure or limitation of the library's operations in connection with the complex pandemic situation.

Until 9 January

**Along the Trans-Siberian Railway. The Czechoslovak Legion in Russia as literary inspiration**

Until 27 March

**Changes in rural architecture in the 19<sup>th</sup> and 20<sup>th</sup> centuries in Bohemia**

1 May – 30 August

**University theses. An exterior presentation upon the occasion of the 10<sup>th</sup> anniversary of the entry of the university thesis collection into the UNESCO Memory of the World register**

1 June – 20 August

**The memories and dreams of the Tropic of Cancer**

25 June – 20 August

**Bookbinding 2021. The XVII joint exhibition of handicraft bookbinding by the members of the Association of Czech Bookbinders**

30 August – 15 October

**We read. Do we read? Let's read!**

1 September – 15 September

**The Lipnice Bible 1421–2021: A Shield of Faith in the Turbulent Times**

1 September – 29 September  
**170 years since the establishment of the Prague City Archives**

7 September – 30 October  
**(Un)Happy Ukraine. Personalities of the Ukrainian Free University in Prague 1921–1945**

19 October – 11 November  
**100 Years of Czech-Norwegian diplomatic relations**  
The official opening of the 100 Years of Czech-Norwegian diplomatic relations exhibition.

10 November 2021 – 8 January 2022  
**Ex Oriente Lux. Rudolf Dvořák (1860–1920). Between the Orient and the awakening of the Czech Nation**

19 November 2021 – 22 January 2022  
**The 100<sup>th</sup> Anniversary of Aid to Russians in Czechoslovakia (1921–2021)**

13 December 2021 – 30 January 2022  
**The Book and the Veil. 1100 Years since the death of Princess and Saint Ludmila**  
A virtual exhibition on the Manuscriptorium website.

Two more virtual presentations were prepared during the year:

**The Vyšehrad Codex – the most valuable book in the Czech Republic**  
**Clementinum 1791. The first industrial exhibition on the European continent**

The **Exhibit of the Month** exhibition series, which introduces visitors to the most important written monuments preserved by the Department of Manuscripts and Old Prints, continued in the foyer of the General Reading Room.

October  
**Almagestum novum by G. B. Riccioli (1651) and Cometographia by J. Hevelius (1688)** – two astronomical works preserved in the collections of the National Library of the CR.

November  
**Tabulae Rudolphinae... traduxit Ioannes Keplerus – [Johannes Kepler, Rudolphine Tables]**  
**Athanasii Kircheri Ars magna lucis et umbrae – The Great Art of Light and Shadow**  
published in Amsterdam in 1671

December  
**The Map of the War Expedition in Bohemia Sheet I / Kriegs-Expeditions-Karte in Böhmen**

Exhibitions of the Slavonic Library held outside the Clementinum

**František Skorina (1470–1552). Renaissance intellectual between Prague and Vilnius**

The 2017 panel exhibition dedicated to František Skorina, a physician and translator from Polotsk in present-day Belarus, the author of the first translation of the Bible into Old Church Slavonic, has been updated to become part of the UNESCO Cultural Heritage Program focusing on, among other things, Belarus in 2021.

The exhibition was installed in eight cities around the Czech Republic during 2021.

# Publication activities

## I PROFESSIONAL TEXTS FROM THE AREAS OF LIBRARY SCIENCE, INFORMATION SCIENCE AND BOOK CULTURE

### a) Proceedings, handbooks, studies, bibliographies and promotional materials

Citování kartografických dokumentů: chicagský styl a ISO 690 [A citation of cartographic documents: the Chicago style and ISO 690]

ISBN 978-80-7050-744-5

Collectio operum musicalium e possessione P. Barnabae Weiss

ISBN 978-80-7050-754-4

Interkulturní knihovnictví [Intercultural librarianship]

ISBN 978-80-7050-755-1

ISBN 978-80-7050-756-8 (pdf)

Jak řídit knihovnu: příručka pro začínající vedoucí/ředitele knihoven [How to run a library: a guide for aspiring library managers/directors]

ISBN 978-80-7050-748-3

Národní knihovna České republiky: výroční zpráva 2020 [The National Library of the Czech Republic. The 2020 Annual Report]

ISBN 978-80-7050-740-7 (online; pdf)

ISSN 1804-8625

... papír a olovo: hudebniny vydané tiskem v Praze v 19. století ze sbírky hudebního oddělení Národní knihovny České republiky [... paper and lead: sheet music published in 19<sup>th</sup> century Prague and housed in the collection at the Music Department of the National Library of the Czech Republic]

ISBN 978-80-7050-743-8

Projekt S knížkou do života (Bookstart) a logopedická prevence: metodická příručka pro práci knihoven [The Bookstart Project and speech therapy prevention: a methodological guide for libraries]

ISBN 978-80-7050-752-0

ISBN 978-80-7050-753-7 (pdf)

Regionální funkce knihoven 2020, Výroční zpráva o plnění regionálních funkcí krajských knihoven na území ČR za rok 2020 [Regional library functions 2020. The annual report on the performance of the functions of the regional libraries in the Czech Republic for 2020]

ISBN 978-80-7050-742-1 (pdf)

Restaurování a konzervace knihovných fondů a archiválií na Novém Zélandu a v Austrálii: shrnutí poznatků ze studijní cesty a nové možnosti [The restoration and conservation of library collections and archival materials in New Zealand and Australia: a summary of a study tour and new opportunities]

ISBN 978-80-7050-745-2 (pdf)

Standard pro dobrý knihovní fond: metodický pokyn Ministerstva kultury k vymezení standardu doplňování a aktualizace knihovního fondu pro knihovny zřizované a/nebo provozované obcemi na území České republiky [The standard for good library collections: a methodological instruction issued by the Ministry of Culture defining the standard for the replenishment and updating of library collections for libraries established and/or operated by municipalities in the Czech Republic]

ISBN 978-80-7050-747-6

Standard pro postupy rekonstrukce knihoven: metodický pokyn Ministerstva kultury k vymezení doporučených postupů a parametrů pro optimální průběh rekonstrukce v knihovnách zřizovaných a/nebo provozovaných obcemi do 40 tisíc obyvatel [The standard for library reconstruction procedures: a methodological guideline issued by the Ministry of Culture to define the recommended procedures and parameters for the optimal course of reconstruction in

libraries established and/or operated by municipalities  
with up to 40,000 inhabitants]

ISBN 978-80-7050-749-0

ISBN 978-80-7050-750-6 (pdf)

#### **b) Periodicals**

**Knihovna [Library]**

Year 32, Nos. 1, 2 (2021)

ISSN 1801-3252

ISSN 1802-8772 (online)

**Knihovna plus [Library Plus]**

Year 17, Nos. 1, 2 (2021)

ISSN 1801-5948 (online)

**O. K. – Ohlášené knihy [O. K. – Reported Books]**

Year 29, Nos. 1–24 (2021)

ISSN 1801-6391 (online)

**Přirůstky odborné literatury ve fondu Slovanské  
knihovny [Acquisitions of specialised publications for  
the collection of the Slavonic Library]**

Year 31 (47), Nos. 1–4 (2021)

ISSN 1802-3797 (online)

#### **II SLAVONIC LIBRARY PUBLICATIONS**

**Biblioteka A. L. Bema: Varšava – Praga, 1921–1945:  
opyt rekonstrukcii i pisanija [The library of Alfred L.  
Bem: Warsaw – Prague, 1921–1945: An attempt at its  
reconstruction and description]**

ISBN 978-80-7050-739-1

#### **III OTHERS**

**Meziválečná přestavba Klementina  
[The interwar reconstruction of the Clementinum]**

ISBN 978-80-7050-746-9

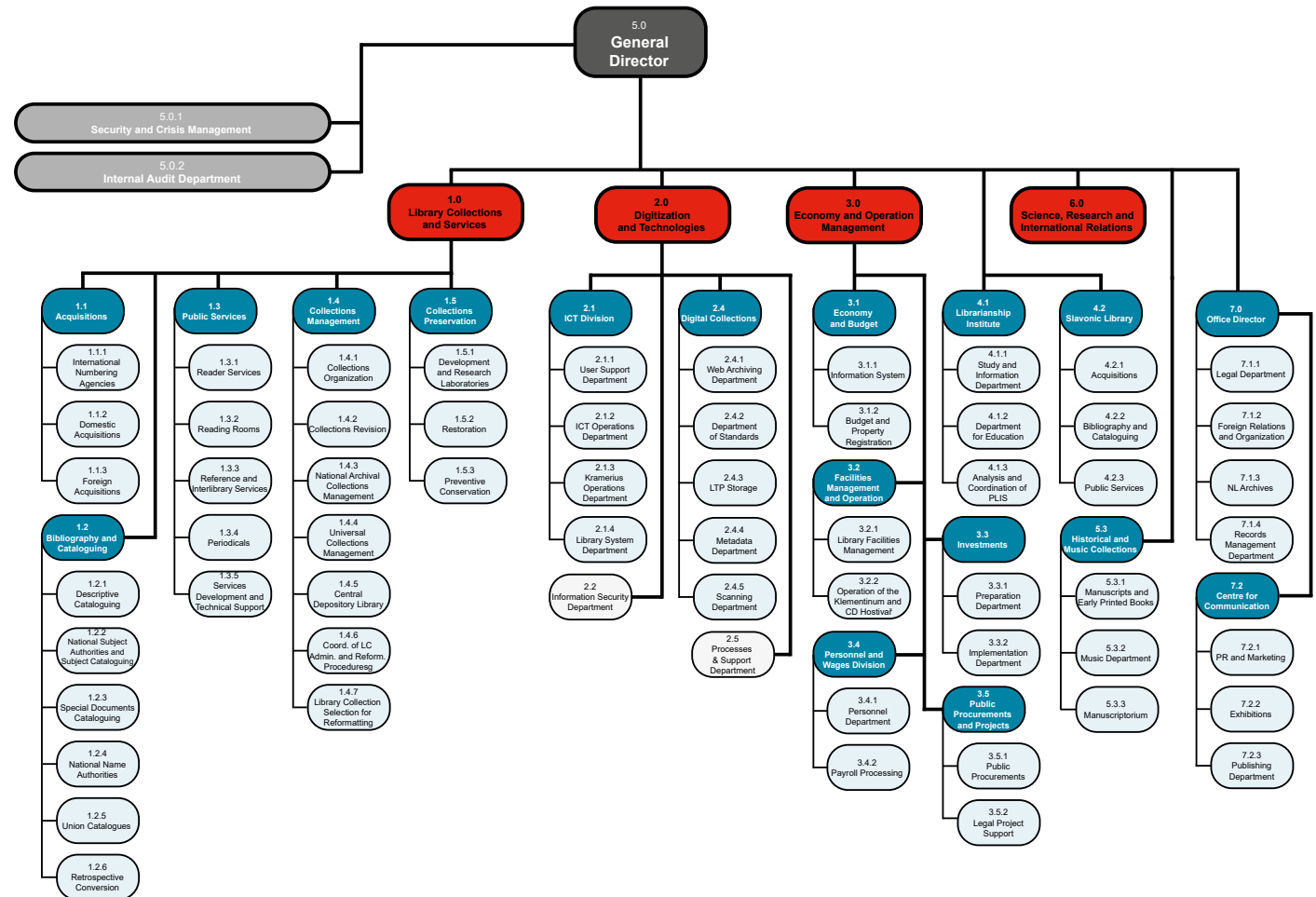
**A Desk Calendar for 2022**

**Hranice v pohybu [Borders in motion]**



# The appendices

## The organisational structure as of 31 December 2021



# Abbreviations

l. i.	Library item
MARC 21	Machine Readable Cataloguing
MoC	the Ministry of Culture of the Czech Republic
NDL	the National Digital Library project
NL CR	the National Library of the Czech Republic
RISM	the Répertoire International des Sources Musicales
SDRUK	the Library Association of the Czech Republic
SKIP	the Association of Library and Information Professionals of the CR

# Contacts

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<http://www.klementinum.cz/>  
<http://www.facebook.com/narodni.knihovna>  
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## **The Reference Centre**

Reference and Interlibrary Services  
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reference@nkp.cz  
(+420) 221 663 202 (Interlibrary Loan Services)  
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## **The Main Hall**

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(+420) 221 663 521 (Collection Management)  
(+420) 221 663 575 (Collection Preservation)  
(+420) 221 663 209 (Acquisitions)  
(+420) 221 663 306 (International Numbering Agencies)

## **The donation account of the National Library of the CR**

123-85535011/0710  
Česká národní banka, Prague 1

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