NEW SOLUTIONS OF THE NATIONAL SZÉCHÉNYI LIBRARY FOR THE MULTILEVEL NATIONWIDE LIBRARY COOPERATION

The Results and Future Plans of the National Library System Project

Árpád Maczelka

In 2017, the NSL in a consortium with the Governmental Information Technology Development Agency established the Nation Library System Project. The project called the National Library Project aims at the significant overall improvement of the National Széchényi Library's IT infrastructure and services to meet the challenges of the 21st century. There are three main sections of the project, which will help the nationwide cooperation of libraries. The first one is the creation of a multitenant software solution which guarantees all the conventional functions and modules of integrated library systems (e.g. catalogue, acquisitions, circulation, etc.). However, its purpose is to surpass these systems. The second section of the NLS Project includes, among other things, the establishment of the Hungarian National Namespace which will act as a consortium with other repository institutions. The third section is the creation of the new Digitization Centre of the National Széchényi Library, which will become one of the largest digitization facilities in Central Europe.

Keywords: National library platform, Bibframe, namespace, Digitization, cooperation, common catalogue, FOLIO, electronic eesources

maczelka.arpad@oszk.hu
National Széchényi Library, Budapest, Hungary
http://www.oszk.hu/

"*In the nonstop tsunami of global information, librarians provide us with floaties and teach us to swim.*"

Linton Weeks quotes this sentence from Nancy Kranich, chief librarian at New York University, who made this statement at the midwinter meeting of the American Library Association in January 2001.[1] I believe that for the past few years the aforementioned tsunami has gotten bigger and bigger, and so libraries need to provide state-of-the-art tools and services to help users survive in this environment and teach them to swim in the bottomless ocean of information. To achieve this goal a Government Decision was declared in 2016, providing funding for the IT and services development of the National Széchényi Library (NSL). To enforce this Decision the NSL in a consortium with the Governmental Information Technology Development Agency established the Nation Library System Project. In this article, I am going to introduce this Project focusing on the most important and exciting elements in the subject of cooperation with libraries and patrons.

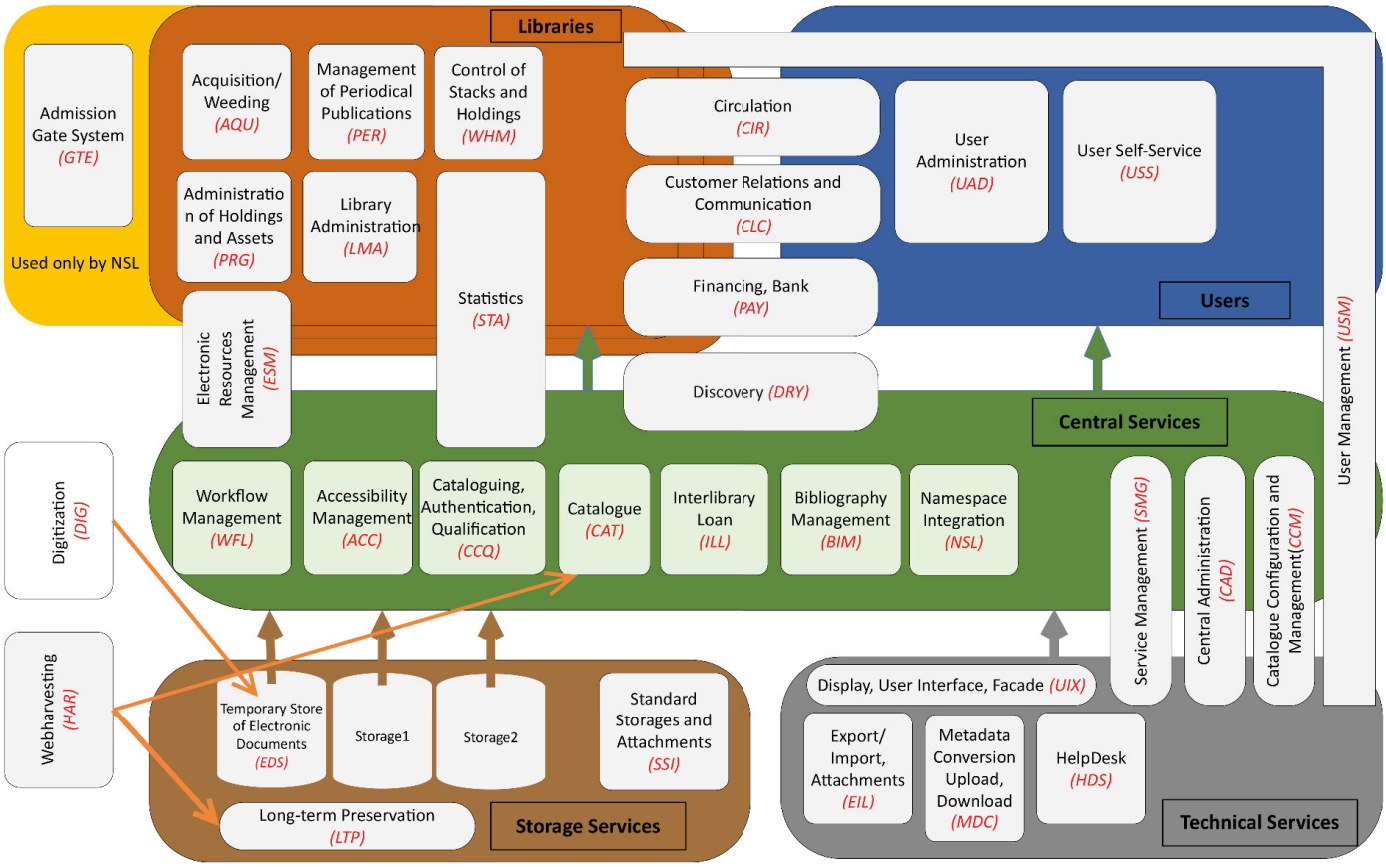
First, I would like to present the most important central element of the NLS Project, the National Library Platform (NLP). The NLP is a multitenant software solution that guarantees all the conventional functions and modules of integrated library systems (e.g. catalogue, acquisitions, circulation, etc.), but its purpose is to surpass these systems. The Platform will be based on the FOLIO (*Future of Library Is Open*)[2] system.

FOLIO is an open-source community development and a unique collaboration of libraries, developers and vendors whose aim is to create a wide range of applications/modules suited to the needs of the different partners. The host of FOLIO is the Open Library Foundation, and among the partner libraries are Chicago University, University of Glasgow, GBV (the-common library network of the seven German federal states) and many others. Among the developers are such companies as EBSCO, @Cult, Arkivum and the Hungarian HerMész-Soft.

Source: https://www.folio.org

The graph illustrates its key property, a high degree of modularity. The most important part of the development is the messages bus called Okapi, which manages the connection of the different modules and applications. In the future, libraries (or in later phase archives or other repository institutions) will be able to pick the apps and modules they need, in a manner similar to the Android system and the Play Store.

Many elements are already available. Take, for example, one of the most exciting modules for library cooperation, the Electronic Resource Sharing module, which provides assistance in the common and effective use of subscribed digital content by a group of libraries. The Chalmers University Library is implementing several other modules (catalogue, inventory, user management), and their platform based on the FOLIO system has been in use since October 2019.[3] The NSL would like to use the results of the community developments for as many functions as possible because it can increase sustainability in the long term.



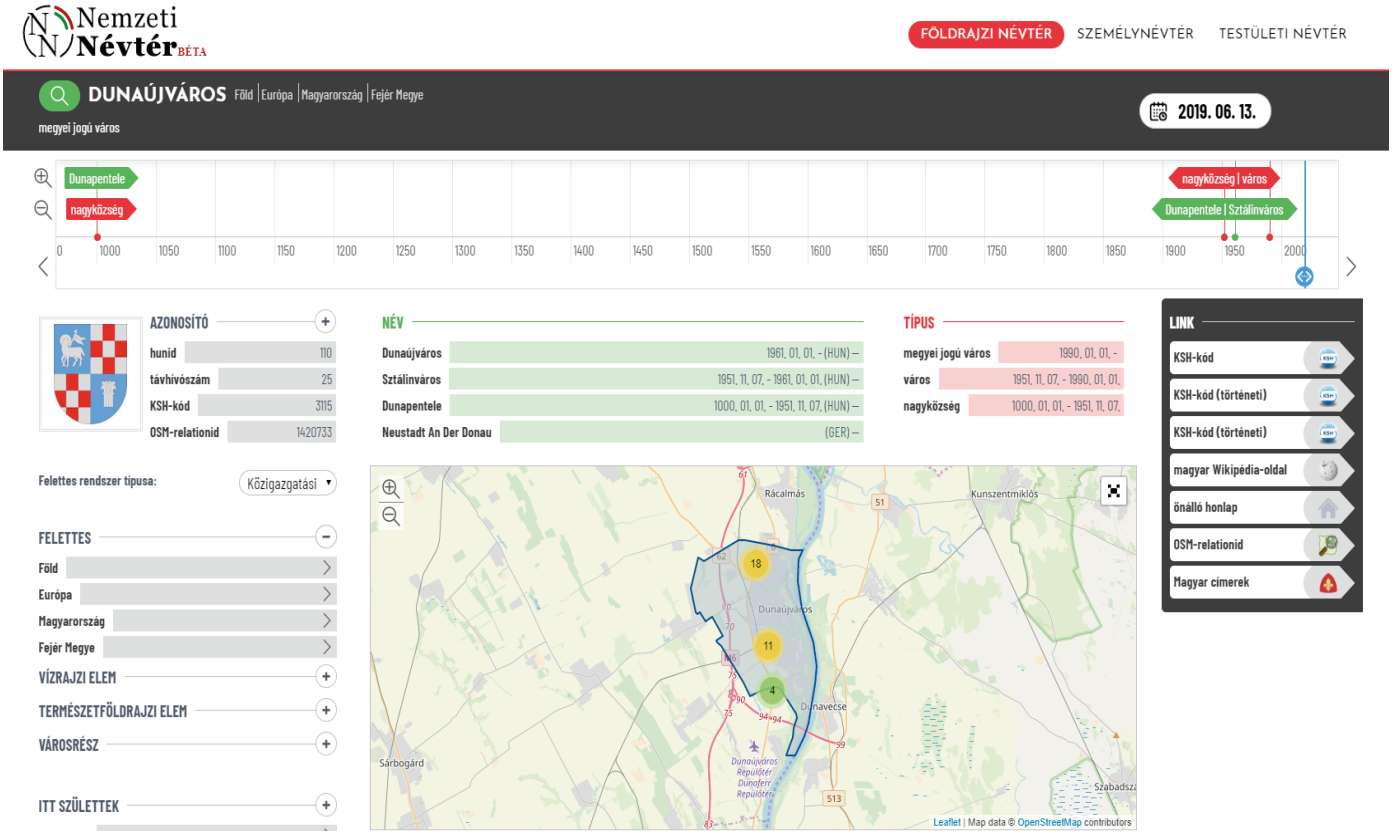
This picture shows us just how complex a platform we want to create is. It will enable us to provide central services to everybody, but it can also be a tool for the common work of the libraries connected to the platform at different levels. It will be possible to create various virtual collections and users will be able to create their own collections, for example about their family legacy. It will enable the library to use the platform with full functionality it can create and use its own unique display and user interfaces to maintain an independent appearance.

The Catalogue module is a key element of the NLP, the main goal of which is to create an actual national common catalogue. The Hungarian libraries use the MOKKA (*Magyar Országos Közös Katalógus – Hungarian National Common Catalogue*) service as a common catalogue, but it needs a major renewal. In the future, the NLP's catalogue can serve as the new common central catalogue. The new catalogue will store the data on an entity basis. The following formats will be available for cataloguing: MARC 21, Dublin Core and Bibframe. However, in the future,

this list will be even longer and will guarantee that other cultural institutions will be able to use the system. The system will have a modern discovery element to enable the most sophisticated search for patrons and librarians as well.

After many challenges with the procurement procedure, we are proud to report that the contract for the development of the platform was signed in April 2019, and after finishing the physical and logical system plan in August, the development of the first modules finished in November. As part of the development, a new online content management system will be developed in autumn 2020. This system solution will be fully integrated into the National Library Platform. The goal is to make it as easy as possible to create thematic collections. The content producers will not need any special IT and web page editor skills, they will be able easily pick the elements to showcase from the catalogue and digital object store of the platform, and give further descriptions and narratives. They will be also allowed to use geographical tagging and timeline functions for better visualization. The content management system will contain elements that will make crowd sourcing and citizen science possible. It will be able to create a much more interactive connection between the collections and users and, in a further stage, will help achieve the faster and more complete description of the collections.

The NLS Project includes the establishment of the Hungarian National Namespace, which will act as a consortium with other repository institutions. The consortium partners will operate a common editorial office. It guarantees that the elements of the catalogues' bibliographic data come from the same national namespace, which helps uniform interpretation and makes semantic publication easier. The beta version already went live in May at the URL www.abcd.hu. It already contains the geographic namespace, corporate and institutional namespace and the personal namespace. In the near future, it will be expanded with the namespace of the Universal Decimal Classification and other common nouns namespaces. Every entity in the namespaces has its own unique identification and is linked to other databases such as Wikipedia, Viaf, ISNI, Hungarian Electronic Library. To ensure that users find the right entity, every geographical record is shown on a map, and a timeline helps proper identification.



For example, if a town has several names like the Hungarian city, Dunaújváros, which can be found in the geographical namespace as Dunaújváros, Sztálinváros, and Dunapentele, in the map you can see that it is the same city, and the timeline shows what the name of the city was at a given date. For the users of the personal namespace, a lot of portraits help identification. The system is also linked with the data of the Hungarian Central Statistical Office and the National Election Office. The Hungarian National Namespace will be fully integrated into the NLP.

Another important element of the NLP is the digital storage services, which will operate as a long-term preservation system as well. For preservation purposes and to operate the platform, there will be a storage system with 20 petabytes of storage. It will enable the NSL to fulfil its legal obligation to preserve the digitized documents handed in by all the libraries of the country. This storage capacity is also necessary because as part of the NLS project the NSL's new Digitization Centre will be established on the 8th floor of the library. According to our plans, as the result of the developments, the NSL will have one of the largest digitization plants in Central Europe. We have already purchased all the equipment that guarantees all document protection criteria are met, making it possible to digitize all document types in the heterogeneous document group of the library. For this purpose, we have purchased top camera scanners, map scanners capable of recording size A0 maps, professional document-photo stations, robot scanners and microfilm scanners. The reconstruction of the 8th level of the NSL is currently under progress, it is set to provide the proper environment for the Digitization Centre with 80 workstations.

The aim of the Centre is to operate at a professional level capturing about 10 million pictures a year so that over a period of 10 years we can record all the physical documents of the NSL, whose physical conditions make it possible. Work of this volume cannot be undertaken without the proper software support. For this purpose, there is ongoing software development, called Digitization Support Framework. The framework aims to control the entire process of digitization. It consists of several modules that will operate fully integrated into the NLP. It will be able to organize the workflow management of the digitization centre and guarantee that every workflow will result in a Submission Information Package suitable for the OAIS model, which will be transferred to the long-term preservation system. This system aims not only to serve the NSL's needs but also those of remote users of libraries and cultural institutions, thereby helping national cooperation. The NLP will have an element called digital desiderate, which will be a special database where every institution based on its digitization plan will be able to provide information on what they would like to digitize in the near future, so duplicates can be avoided. The digitization plan of the NSL's Digitization Centre will be a part of this database as well.

As part of our project, a web-archiving pilot started in 2017 yielding substantial results. In the future, it will be fully integrated into the platform, and the online content management system will serve as the publication tool for the results of the harvesting and archiving of Hungarian webpages.

The National Library System Project as its name indicates that it is not only about the renewal of the national library, it is also a constant development package which will make sectoral cooperation possible, providing adequate technological assistance.

NOTES

[1] WEEKS, Linton, 2001. The Old-Fangled Search Engine. In: *The Washington Post* [online]. 2001 (January 13). [Accessed: 2020, January 14]. Available at https://www.washingtonpost.com/archive/lifestyle/2001/01/13/the-old-fangled-search-engine/c9314a91-2076-4ad5-ad45-c99e5691bfbb/

[2] For more information, visit the official website www.folio.org.

[3] Chalmers University of Technology is the First Institution to Go Live with FOLIO Library Service Platform [online]. [Accessed: 2020, January 14]. Available at: https://www.ebsco.com/news-center/pressreleases/chalmers-university-first-institution-to-go-live-with-folio