

The National Library of Norway – policies and services

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ABSTRACT

The operation of National Library of Norway (NLN) is governed by the Legal Deposit Act of 1989, latest amendment in 2015. By this law, all documents of any type made publicly available in Norway, must be provided to the National Library for registration, preservation and dissemination. According to an added regulation in 2018, NLN may also require the digital version of printed documents, as well as core metadata.

Another important policy document is issued by The Ministry of Culture and The Ministry of Education and Research, outlining a library strategy for the period 2020-2023. While including all types of libraries, the strategy has a strong focus on NLN as a driving force and service provider for the rest of the Norwegian library sector, in mandating NLN to support other libraries in a number of ways, - financially through funding development projects, structurally by way of providing crucial infrastructure and developmentally by conducting our own innovation activities.

The national bibliography forms the backbone for many of the infrastructure services, like the *future Metadata Well*, constituting one single authorized source of metadata for Norwegian libraries, various authority *files*, as well as several *thematic bibliographies*. It also lies at the heart of enabling end users to access the vast collections of digitized material, even much of the IPR-restricted material, obtained through deals with rightsholder associations.

KEYWORDS

National libraries; Governance; Library services; National bibliographies.

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Introduction

A key role of most national libraries is to collect, describe and preserve everything that is published in a particular country. The exact interpretation of "published" and "everything" may vary among countries, – IFLA National Libraries Section expresses its overall goal as "supporting the vital role of national libraries in society as custodians of the worlds' intellectual heritage, providing organisation, preservation of and access to the national imprint in all its forms" (IFLA National Libraries Section 2015). However, during the recent years, openness – both in terms of access to collections and physical space, is seen as an increasingly important value in academic libraries (Anderson et al. 2017, 14, Larsen 2017, 52). This trend is thoroughly embraced by the National Library of Norway (NLN), and is also clearly demanded by the Ministry of Culture. NLN's work on openness first and foremost applies to the collections, and the major premise for that is the mass digitization activities since 2006. Nonetheless, and in spite of a somewhat austere-looking (listed) building, there has also been put strong focus on welcoming students and researchers as well as the general public into the library building, be it for studying, socialising with colleagues and friends or participating in some event.

The following is an account of the NLNs approach to fulfilling its mission.

Governance

The operation of National Library of Norway (NLN) is governed by several policy documents, each with their separate time horizon, from the long term Legal Deposit Act (Norway. Ministry of Culture 2015), via a medium term national Library Strategy (Norway. Ministry of Culture and Norway. Ministry of Education and Research 2019) to the yearly Letter of allocation. The regulatory documents and their influence on NLN's internal strategies and operations are described in more detail below.

The Legal Deposit Act

The Legal Deposit Act of 1989 represents the very "raison dêtre" for NLN, as it defines a stable, very long term basis upon which to construct the national library organisation and its operations. By this law, all publishers, producers or importers of documents made publicly available in Norway, are responsible for providing those documents to the National Library for preservation and dissemination.

The Legal Deposit Act applies to 'any' kind of documents, both physical and digital, on any media – and has done so since 1989. However, through an amendment in 2015 together with an added regulation in 2018 two important changes were stipulated.

Firstly, NLN now may also require the digital files from which the published documents are produced (e.g. pdfs used for printing books), and secondly we may require some core metadata with the deposit. The national library for its part is responsible for creating/enriching the metadata to a level befitting a national bibliography, as well as managing the catalogue and catalogue products.

The Norwegian national bibliography covers several types of materials: Monographs/books, pe-



riodicals, recorded music published on physical carriers, sheet music, articles in periodicals and resources related to the Sami population in Norway.

These two updates to the law represent great opportunities for streamlining the material flow, and thereby getting the content out to the public faster.

The National library strategy 2020-2023

Another important policy document is *the National strategy for libraries 2020-2023* issued by The Ministry of Culture and The Ministry of Education and Research, outlining a four-year strategy comprising all types of libraries, but with strong focus on NLN as a driving force and service provider for the rest of the library sector. Commonly referred to as *The Library Strategy* for short, and with its emphasis on active dissemination, it mandates NLN to support the other types of libraries in their endeavours, – financially through funding development projects, as well as structurally by way of providing crucial infrastructure to the libraries.

In the words of the strategy document, libraries should develop into "a space for democracy and self-cultivation" (Norway. Ministry of Culture and Norway. Ministry of Education and Research 2019, 3). Moreover, it is points out very strongly that the national library is the government's main instrument and driving force to achieve this, listing a number of duties and tasks for the national library.

The "infrastructure services" to be provided by NLN to other libraries, may be subdivided into 3 groups.

- 1. Content: The strategy's strong focus on dissemination naturally implies a requirement to provide content, as much as possible digitally, but also physically.
- 2. Metadata: To administer the content, bibliographical data as well as authority data of good quality are needed.
- 3. Library tools and guidelines: Part of NLN's duties is also to function as national competence and resource centre for other institutions in the library and cultural sector. This involves keeping up with the development within library science in general and in the bibliographic domain in particular, and provide useful standards, tools and guidance for the whole sector.

Both (digital) content, metadata and authority data should be adapted for machines and humans alike, and the access mechanism must be easy to understand, well documented and readily available for libraries as well as third parties.

Lastly, the guiding principle is that infrastructure services (content, metadata, standards, etc) that NLN provides to the library sector are to be free of charge for end users as well as libraries, – or as cheap as possible.

Summing up, the main message to NLN from the Library strategy is the responsibility to actively disseminate and expand its own collections in various ways on many platforms, to users inside and outside the libraries. Equally important is NLN's obligation to enable other libraries to offer high quality services to their local patrons. To achieve this, NLN shall develop shared, national infrastructure, to make sure that local, often thinly staffed libraries can spend their time and effort to serve their local patrons, not on work that could just as easily be performed centrally at a national level.



The letter of allocation

This document, issued by the Government after its yearly process of negotiating the national budget, defines NLN's total budget for the year in question, along with any specific areas to focus on, sometimes accompanied by dedicated funding.

The Public Library Act

This law (Norway. Ministry of Culture 2013) stipulates that all municipalities in Norway must offer a public library to its citizens. NLN's role is to enforce the law, in particular the paragraph about competence, instructing each municipality to hire a library manager educated in librarianship.

Content creation and dissemination

The material acquired through legal deposit forms the core of the library's collection, although other material is purchased, in particular documents published abroad which is relevant to Norwegian affairs (Norvegica Extranea). Handling deposited material efficiently is the task which forms the foundation for everything else, and the task that is our sole responsibility. Making the content accessible to users, also involves documenting it in terms of structured metadata, which ultimately forms the national bibliography. Hence, the topic of bibliographical control lies at the heart of the whole process of receiving and processing legal deposit.

Through an extensive digitization project since 2006 – at present about 600 000 books are digitized, practically all the books in our national bibliography. Also, about 60 % of NLN's historical newspaper collection is digitised, and all current newspapers are deposited digitally as well as in paper.

In addition to handling deposited material, NLN also creates content itself, mainly in some way based on the collections. Among these are digital productions like podcasts and streamed events, as well as research-based publications, theme-based bibliographies and re-publications of older literature.

As already mentioned, the national Library strategy focuses very strongly on dissemination: "... The goal is for libraries to introduce new users to literature and reading, facilitate knowledge dissemination and expand digital collections. The government will implement strategic measures that support libraries and librarians in attracting more users, including those who do not visit libraries." (Norway. Ministry of Culture and Norway. Ministry of Education and Research 2019, 3)

A large proportion of our physical collection is digitized and therefore – technically – available anywhere through NLN's digital library nb.no¹ and through the main catalogue discovery service Oria. An overall goal is that as much as possible of NLN's content can be accessed throughout Norway. Since much of the material is constrained by copyright, there are legal and financial challenges to be overcome. Consequently, an important part of NLN's dissemi-

¹ https://www.nb.no/en/the-national-library-of-norway/



nation strategy is to negotiate agreements with IPR holders about exposing digitized material still under copyright. At the time of writing, digital books published before 2001 may be read on any device with a Norwegian IP address. The clear message from the Ministry of Culture is that NLN should try to overcome more IPR obstacles, so that books newer that 2001 can be accessed anywhere in the country. Hence new negotiations with the publishers and their organisations will be opened soon.

While great resources are put into maximising the digital content that may be accessed directly by end users, direct availability for end users is not possible for everything. Another agreement with publishers enables patrons of local libraries to access all deposited material from within the walls of their local library, provided it is used for documentation or research. This includes all digitized newspapers and books – also those newer that 2001. Through a special agreement with about 70 running newspapers, any library visitor may read them from 2 weeks after publication onwards.

To provide the same democratic access to physical material for all inhabitants of Norway is no small challenge, Norway's geographical and demographical conditions being as they are. Norway is the 3rd least densely populated country in Europe², and the distance from south to north almost spans the whole continental Europe. At the same time, all municipalities are mandated by law [publ act] to offer a public library, however small and however few people live there. Hence, interlibrary lending is by necessity an important element of the library services. To support this, NLN has provided a service called *Biblioteksøk*³ ('Library search'), a joint discovery&lending service covering the holdings of all Norwegian libraries. Through Biblioteksøk users may reserve books held by any library in the country, and pick it up at their local library.

The NLN Depot library, containing almost a complete set of Norwegian printed monographs, journals, and newspaper microfilms is by far the largest supplier to interlibrary lending. It is built up from legal deposit 'leftovers', transferred material from other libraries and some purchase. The actual lending process is handled by an efficient automatic storage facility. Thus, the Depot library greatly decreases other libraries' burden that interlibrary lending usually represents.

An important part of the Depot Library is the Multilingual Library Collection. Many of the small libraries in Norway, struggle to be able to offer books to their immigrant population. *The multilingual library*⁴ is a service for public libraries designed to remedy this to some extent. Its collection comprises literature acquired from a multitude of countries in equally many languages. While being available for all through ordinary interlibrary loan, its main purpose is to support libraries in providing services to their multilingual and multicultural population. Any public or school library may borrow 'mini-collections' or 'book-cases' composed according to their own requirements to be used as their own holdings for a period of up to 6 months.

² https://www.worldometers.info/population/countries-in-europe-by-population/

³ https://bibsok.no/

⁴ https://dfb.nb.no/multilingual-library



Research data - The language bank

In order to develop high-quality language technology for Norwegian, big datasets with Norwegian speech and text are needed. Since Norwegian is a very small language in terms of speakers, we cannot rely on others providing such resources. Consequently, NLN Language Bank has as its primary task to provide and organize such data sets. Our resources are aimed at researchers and students, as well as commercial companies developing language technology software. The resource collection comprise among other things, lexical resources like wordnet and dictionaries, corpora of written and spoken language, i.e. large collections of text and speech in machine-readable format. The language bank is NLN's main contribution to the shared European research infrastructure called Clarin⁵.

All language resources are available online via the National resource catalogue⁶, which also includes resources from other Clarin centres in Norway. The metadata here follows the Clarin-defined framework, in which profiles and subcomponents can be defined, understood and reused across Clarin centres.

Closely associated with the Language bank is Digital Humanities Laboratory, a service supplying scholars, students, and library users with digital tools and methods in their studies, as well as assistance in their use.

The Norwegian national bibliography and other bibliographical services

The NLN is responsible for developing and maintaining an online national bibliography, holding the view that a national bibliography is not merely a tool for information retrieval but is in itself a rich source of insight into a nation's cultural heritage and intellectual production, and as such constitutes valuable research data within many fields of study. While defined by Parent (2008, 10) as "a *current*, *timely*, *comprehensive* and *authoritative* list of all titles published in a country", NLN also includes titles published abroad by Norwegian agents or about Norwegian affairs.

Some parts of the Norwegian national bibliography are still managed in separate legacy databases, but its main portion – along with other, thematic bibliographies – reside as virtual subsets in the main catalogue shared with about 80 other academic libraries.

The whole national bibliography can be accessed through a separate instance of the discovery interface, the discovery service of our main catalogue. The bibliographical data are also freely available via OAI-PMH in MARC 21 format and Dublin Core, to be used for research purposes as well as anything else.

Below is the access page for the Norwegian national bibliography at the search & discovery interface to the catalogue. As shown in the figure, it is subdivided into the subsets of books, serials, musical recordings, sheet music, Sami publications and articles in Norwegian and Nordic publications. The parts that reside in a legacy system are Norwegian registry of serials, Index to articles in Norwegian and Nordic periodicals as well as older parts of the Registry of Norwegian printed sheet music.

⁵ Common Language Resources and Technology Infrastructure: https://www.clarin.eu/

⁶ https://www.nb.no/sprakbanken/en/resource-catalogue/



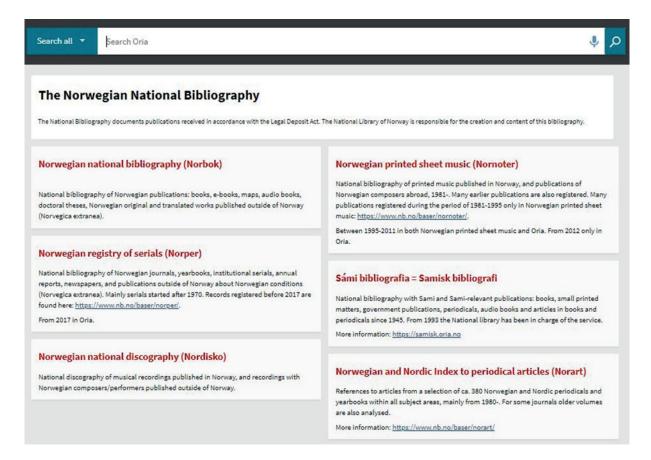


Fig. 1. End user access page for the Norwegian national bibliography

Authorities

Connecting bibliographical data to authorities is an important measure to maintain a certain degree of consistence and reliability in the metadata. So far we have a fairly large authority file for agents (persons and corporations) as well as up-to-date Dewey via WebDewey, a genre form thesaurus published as linked data. A work authority file is in progress, partly through NLN's participation in the library-driven collaboration project Share-VDE⁷.

While machine-readable access to agent authorities is provided through a REST API as well as harvesting and download facilities, human users may browse the same 2 million authorities in a dedicated search interface . The set includes all agents referred to by NLN holdings, as well as the holdings of the other academic and special libraries sharing the same catalogue. An increasing number of authorities contain references to other registries, in particular to $VIAF^8$ and $ISNI^9$.

⁷ https://www.share-vde.org/

⁸ Virtual International Authority File: http://viaf.org/

⁹ ISNI (International Standard Name Identifier): https://isni.org/



Metadata delivery to the library sector

The current Library strategy mandates NLN to supply free metadata to all libraries. Because prepublication metadata are important sources of acquisition for the libraries, it is important that these metadata be produced as soon as information about a planned publication is available.

NLN's internal processes can at present not guarantee such promptness, hence since 2017, metadata about Norwegian publications (printed book, audiobooks, ebooks and language cources) have been procured from commercial metadata vendors, making sure they follow NLN's cataloguing practice for the national bibliography, and include certain elements particularly wanted by the public libraries, such as subject headings from a certain vocabulary. An important aspect of this is to always authorize agents mentioned in the metadata. Using the API, it is possible to integrate Authority lookup into their own cataloguing system.

This approach will be continued and NLN will assess the feasibility and necessity of expanding to free metadata for other kinds of material such as film and music. Also, libraries have requested access to metadata for foreign material. During the strategy period, the National Library will attempt to find good solutions for including this in its deliveries.

Service overview

Table 1 presents an overview of the services NLN renders as mandated through the Act of legal deposit and the National Library strategy 2020-23, some of which are described in more detail above.

The services are grouped vertically according to type, horizontally according to target group (end user, libraries, third party).

The data services are in principle open for all, there is no difference between any person and a library when it comes to accessing and using our bibliographical data, nor other research data. Content is a different thing, for which copyright is a deciding factor for availability. Negotiating with rightsholders is typically best handled at the national level. So is maintaining cataloguing rules and guidelines, providing core tools like classification system, and providing a website (bibliotekutvikling.no)¹⁰ supporting collaboration and information exchange, as well as serve as a knowledge resource for libraries.

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¹⁰ https://bibliotekutvikling.no/



Type of service \ Target group	End user	Libraries	3rd party
Outreach (Competence, governance)	Negotiating agreements with publishers about access	 Metadata standards, guidelines and tools for libraries Funding development projects Provide collaboration platform (bibliotekutvikling.no) Manage Act on public libraries Negotiating agreements with publishers about access in libraries 	Collaboration forum with system vendors Interoperability requirements
Content	 The digital library, nb.no The main catalogue (oria.no) Events: Digital and on site Podcasts, social media Physical material 	Extended access to restricted material for patrons in local libraries The Multilingual library The Depot library and Library search	
Data	 Bibliographical data Authorities: Persons and corporations, Dewey, Genre/form and other vocabularies Research data: Language resources 	 Bibliographical data Authorities: Persons and corporations, Dewey, Genre/form and other vocabularies Research data: Language resources 	 Bibliographical data Authorities: Persons and corporations, Dewey, Genre/form and other vocabularies Research data: Language resources

Table 1. Overview of services from NLN according to type and target groups

As evident from Table 1, producing the national bibliography is only a part of the goals and tasks of the national library, yet bibliographic work forms the basis of most of the other activities and services. For example, many of the events, podcasts and other dissemination activities are directly based on objects in the library's collections. Finding and selecting the right objects in each case requires rich and reliable bibliographic data, describing the objects according to several criteria, like chronology, provenance, topical coverage and physical attributes, among other things.

Challenges and future work

Along with the growing emphasis on dissemination and 'opening up' the library to the general public, comes decreased willingness to spend human resources on cataloguing and related activities, and also stricter demands to justify the usefulness of the particular data elements that are produced. This challenges us to find ways to produce metadata more efficiently with fewer staff, yet maintaining the quality and richness. NLN approaches this from various angles:

Firstly, streamlining the processes handling legal deposit has high priority. The relatively new legislative basis for requiring simultaneous deposit of printing file, printed book and (some) metada-



ta, offers great opportunities for streamlining the deposit workflow, not least because the need for manual handling of the printed books is greatly reduced. Realising the benefits of this is ongoing work, and is expected to be ready for trial in a few months.

Another potential gain is the possibility for automatic or machine-supported creation of descriptive, based on text analysis of the printing files. Although no concrete action is taken, this will be looked into further down the line.

Machine learning is a type of technology that is starting to gain popularity also in the library universe, especially for subject indexing and named entity recognition, as exemplified in (Suominen 2019). Currently, NLN is in the early stages of experimenting with automatic classification, using the pre-trained BERT model (Horev 2018) for Norwegian.

The Metadata Well vision

One of the most demanding tasks assigned to NLN and its system partner UNIT¹¹ by the Library strategy is perhaps to establish a so-called 'metadata well': "A further step towards the goal of 'one book, one catalogue entry' will be to create a single authorized source for the metadata – a metadata vault" (Norway. Ministry of Culture and Norway. Ministry of Education and Research 2019, 32). At the time of writing, an RFI document¹² for the Metadata Well is being prepared. Although still very much on the conceptualization and planning stage, the Metadata Well may be thought of as 'an authority file for bibliographical descriptions', in which all metadata produced for the Norwegian National Bibliography are included. So will metadata contributed by other authorized contributors. In its ultimate state of completion, the Metadata Well should contain bibliographic data describing the union of collections in all Norwegian libraries. It is not perceived as a union catalogue, hence no holding data will be included. See also Figure 2 for visualization of the system.

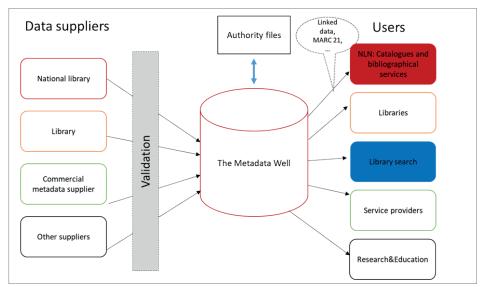


Fig. 2. The Metadata Well in context

¹¹ UNIT Directorate for ICT and joint services in higher education and research (<u>https://www.unit.no/en</u>).

¹² Request for information.



With the Metadata Well in place, libraries can obtain bibliographical descriptions for their local catalogues, either by referring to it or by copying it to their own catalog, all the while retaining its globally unique identifier in their local data. In their catalogue, they only need to add local information.

Hopefully, this resource will constitute a hub for reuse of metadata between libraries, and as such function as a major source for resource sharing among all types of libraries in Norway, including public, school and academic libraries.



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