Nordbib – Nordic Research Library Programme for the Development of Access to Scientific Information in the Nordic countries

Purpose

The overall purpose of the Nordbib programme is to create through research and development a joint Nordic approach to Open Access (OA) and research communication. This is brought about by information sharing regarding policies and strategies as well as by creating a joint information infrastructure that will strengthen and support the research infrastructure in the Nordic countries by permitting access to and publication of scientific information.

The Nordbib programme will strengthen the digital research libraries' collaboration at a Nordic level as regards the development of infrastructure, standards and technical solutions promoting Nordic and European research infrastructure.

The Nordbib programme comprises joint Nordic initiatives in the areas of production of digital scientific contents and publication of Nordic scientific journals as well as developing co-operation with publishing companies and scientific societies regarding migration to e-publishing. The perspective of a Nordic programme is co-operation on defining and realizing policies of OA to scientific information and strategies for quality assurance. The programme should promote the interaction of the various players and their roles in the research communication.

The development of said activities is taking place already locally and regionally in the individual countries, and to some extent at a national level in connection with the national digital development programmes such as DEFF (Danmarks Elektroniske Fag- og Forskningsbibliotek), FinElib, BIBSAM, Stafræn íslensk þjóðbókagátt (Icelandic digital library) and Norsk Digitalt Bibliotek. These Nordic library projects co-operate today through informal channels and information sharing forums.

This informal co-operation has revealed a marked need for a more formal vehicle for Nordic co-operation promoting development and ensuring optimum utility value of already existing competences and technical solutions. In order to avoid a waste of resources and slower progress, there is a great need for coordination and for developing joint strategies, policies and technical solutions. Similarly, it is important through a Nordic programme to strengthen cross-border interaction in the Nordic countries and the Baltic states as well as at a European level. Furthermore, the programme will contribute to strengthening the collaboration between digital research libraries and digital universities and research institutions, so that mutual research communication may prosper and grow at Nordic and European levels.

The background for the purpose of the Nordbib programme:

Research infrastructure is of the utmost importance to basic research, technological development and PhD courses, and thus it plays a major role for the future economic growth in our countries – nationally as well as at a Nordic level. Larger and more complex research infrastructures are employed by researchers from different fields and often in international collaboration. Common use of research infrastructure ensures efficient utilization of resources and paves the way for larger investments, thus providing researchers with the best foundation for research and research communication. Consequently, a Nordic co-operation regarding development of a joint information infrastructure comprising access to digital, relevant research contents and the best conceivable tools for scholarly communication will strengthen Nordic research in an international context. Formerly, research infrastructure was to a very large extent perceived as laboratory facilities and equipment, but in recent years the concept has been widened to include also the infrastructure constituted by libraries, databases, archives and collections.

Over the last decade, the rapid information technological growth in communication, networks, e-publishing and digital archiving has prompted a reconstruction of the publication process. At the same time, the technological means of communication have highlighted not least the question of access to and long term storage of research information. The licensing terms of the major, international publishing houses, soaring prices and sale of package deals of access to millions of journal articles have turned out to limit rather than open up for free and equal information access. The basis of small and minor scientific publishers' existence is in this way radically altered, and the need to find new modes of publication and organisation is getting urgent. The reality of the minor specialist publishers is very often that they are nationally based and publishing in their national language. Quite frequently, they even cover a highly specialized field, meaning that the number of journals is low – maybe limited to a single one. A small researcher potential equals a small financial basis of journal publication. The technological development carries with it increasing demands on the technological skills and systems architecture as far as production, digital archiving and administration are concerned, placing heavy demands on small organisations and publishers. Research constantly demanding topicality, requiring international publication as well as good economy means that the natural scientific fields are ahead in this process of transition. Research in humane and social sciences do not have the same demand for topicality, and often the researcher potential is much smaller. Thus, these areas are more vulnerable. The international trial projects focus on the issues of publishing methods, peer reviewing, electronic filing and free access. Also, new organizational forms are being investigated. All on a grand scale.
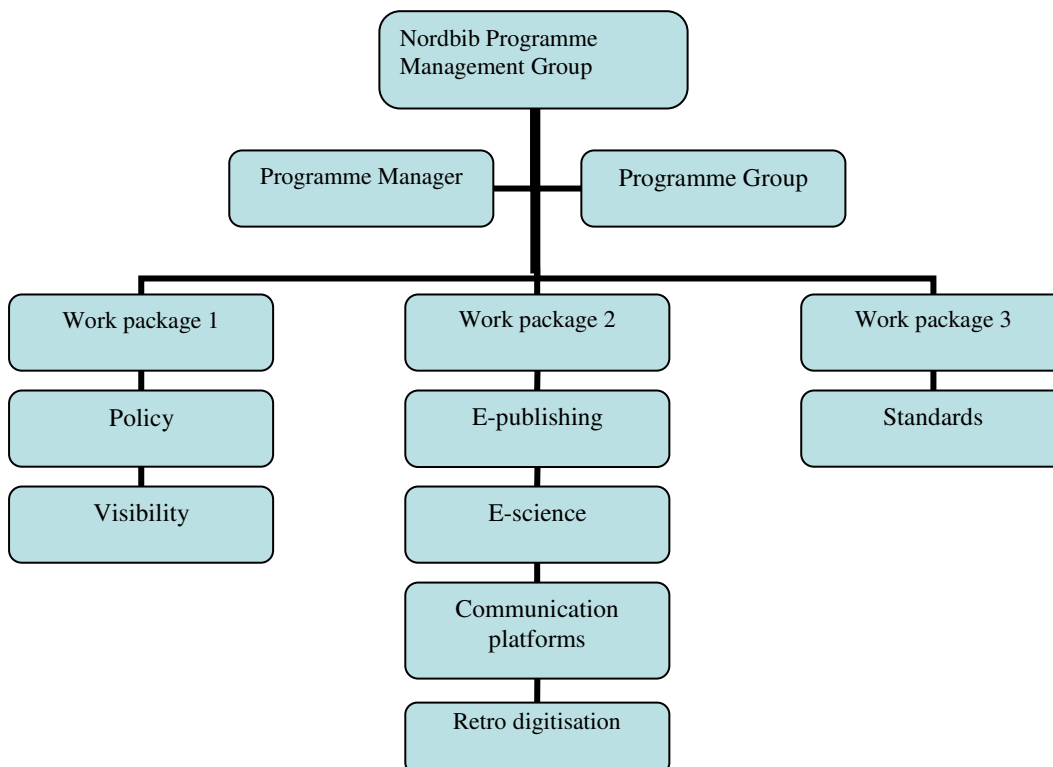
Programme Structure

Nordbib is a four year programme with a total budget of DKK 22.3m (DKK 10m from NordForsk and DKK 12.3m from self-financing). These funds are administered by a programme management group.

The programme structure is headed by a Programme Board. The programme is organized in three focus areas – called work packages – and for each focus area target results – called deliverables - are stipulated. The Programme Board has the overall responsibility for the development and implementation of the programme concept, its success criteria, specific goals and quality requirements – hereunder limits and terms of subsidies. Thus, the Programme Board is to ensure that the objectives of the programme are achieved. A Programme Group has been established, consisting of six Nordic representatives which are able, as far as competences are concerned, to cover the three focus areas. The programme manager is – in co-operation with the Programme Group – responsible for stipulating the specific deliverables and their appurtenant success criteria and is to make certain that project limits and terms are honoured. Additional expert assistance may be obtained.

A programme responsible secretariat is established at the Danish Library Agency. The programme manager is secretary to the Programme Board, chairman of the Programme Group and responsible for the daily operations of the programme.

Programme Organization

Focus Areas (Work Packages)
The programme has its point of departure in the focus areas described initially, including the basic needs for development and coordination, and which are necessary for the fulfilment of the programme's overall purpose

> *'to create a joint Nordic approach to Open Access and research distribution through information sharing regarding policies and strategies as well as by creating a joint information infrastructure that will strengthen and support the research infrastructure in the Nordic countries by permitting access to and publication of scientific information'*

The primary target result of the programme will be to work out recommendations that may aid the Nordic countries in their development of OA policies. In doing so, Nordbib is able to promote OA to Nordic scientific information and thus warrant competitive access to this scientific information at the same level and with the same services as international distribution channels. Another crucial target result will be the establishing of a cooperating network of development environments in research libraries, universities and research institutions who, interacting with each other, work for a strengthening of Nordic research communication. The success criteria will be to contribute to the setting-up of a cohesive infrastructure that supports the production of digital contents, distribution, presentation and communication of scientific and specialist information.

Concretely, the programme's target results aim to establish
- *Access* to digital scientific and learning resources
- *Strategic collaborations* between national libraries and scientific institutions and societies in the areas of e-publishing, methods and tools

Final target results are to be achieved by means of workshop activities and projects through:
- *Active knowledge exchange and recommendations* about OA, and scientific publication in support of OA to Nordic scientific information
- *Rendering visible* the importance of OA publishing and promotion of understanding and dialogue about OA
- *Strengthening* the Nordic information infrastructure for scientific publication through Best Practice within e-publishing and digitisation
- Focus on *interaction* and *task distribution* in connection with e-science
- Strategic collaboration for the purpose of *competitive access* to Nordic scientific information
- *Technical standards* and solutions for recovery and accessibility of scientific information and e-science in digital archives

The overall goal of Nordbib is to promote an efficient co-operation between the Nordic countries in an effort to strengthen the Nordic countries in a global context. Furthermore, Nordbib is intended to engage in active information sharing with the Baltic States. As a result, Nordbib's activities should help emphasize the Nordic utility value as well as support and co-operate with European initiatives, where relevant. Nordbib may be seen as the link between developments at national and European levels.

All Nordbib initiatives should build on and expand existing national, Nordic and international development results and standards, and, moreover, co-operate and support European development activities, where relevant, strengthening thereby the position of the Nordic countries.

Focus Area for Policy and Visibility (Work Package 1)
The Nordbib programme will by means of information sharing and co-operation create widespread understanding of OA and visibility concerning its consequences. The aim of the focus area is to promote dialogue and work out recommendations with regard to OA and, thus, seek to guide rights holders, publishers and the research political environment towards OA policies. This will take place in interaction with research boards and committees, universities, research institutions, scientific societies, research libraries and national libraries. The purpose of the focus area is not only to build upon, but also to strengthen already existing, national activities regarding OA. As far as possible, the programme is to engage in information sharing with strategic European and international initiatives.

Target Results (Deliverables)
The goal is achieved by means of an annual policy-making report, workshop and call for projects, where the proposed projects must illustrate and as a minimum establish a demonstrator (proof of concept) in the areas of OA visibility and knowledge exchange.

- ❑ Policy
  The result is an annual report based on a Nordic workshop at research political level arranged by Nordbib, for instance in co-operation with Nordforsk and NOP, and addressing vital politically oriented topics such as:
    - o State of the art, focusing on success stories and particular challenges to OA policy implementation
    - o Quality Assurance
    - o Measuring the communication of research - hereunder impact factors
    - o Digitization strategy for generating digital research information
    - o OA impact

  The report will form the basis of the Nordbib programme management group's political recommendations and initiatives at both Nordic and national political levels
  Information sharing with the Baltic states will occur by, among other things, inviting them to the workshop.

- ❑ Visibility
  For the purpose of promoting understanding of and dialogue about OA, initiatives are desired that render the importance of OA as well as the successful initiatives and activities pertaining to the issue in the Nordic countries visible. These initiatives should be rooted in both library, university, and research environments.
  The result will be joint Nordic initiatives entailing distribution of information about OA and e-publishing in spite of asymmetrical structures and decision-making forums. Among other things, this could take place by establishing strategic collaborations between libraries, publishers and researchers (rights holders) on issues such as:
    - o license to publish (the researcher's agreement with the publisher about copyright)
    - o access to scientific information harvested by national libraries from the Internet
    - o access to material that becomes digitalised

Focus Area for Content and Accessibility (Work Package 2)
The purpose of the focus area is to support activities related to generating contents, creating access to research and learning resources, and addressing interaction and task distribution in connection with e-science. The national and digital research libraries will take part in the migration of Nordic scientific publishing through Best Practice within e-publishing and digitisation, and also in strategic collaborations about the use of existing communication platforms such as Google, DOAJ or OAister.

In addition, the programme area aims towards establishing strategic collaborations between Nordic scientific institutions, publishers and researchers about strengthening Nordic scientific publication within vulnerable fields such as humanities and social sciences published in Nordic languages. Furthermore, the focus area aims to establish strategic initiatives that have their starting point in interaction and task distribution between scientific environments and research libraries in connection with e-science.

Target Results (Deliverables)

The goal is achieved by means of open calls for projects, where the proposed projects must illustrate and as a minimum establish a demonstrator (proof of concept) in the areas of e-publishing and e-science.
- E-publishing platform and business models
  Result is the establishing of an e-publishing platform comprising the entire workflow of the publishing process, hereunder peer review – a Best Practice model – which can be implemented in several, different publishing environments and supports the preservation activities of the national libraries. Also, the solution should contain alternative business models for Nordic, non-commercial players.
- E-science
  Result is a demonstration project which comprises co-operation between research libraries and scientific environment in a specific field. This field addresses interaction and task distribution in the establishing of structuring and rendering accessible scientific information in the form of raw research data.
- Communication platforms
  Result is a strategic collaboration promoting the visibility of Nordic scientific information in existing international communication services. The activity may for instance be a demonstrator project rendering visible the contents of OA archives based on strategic collaborations about the use of existing communication platforms such as Google, DOAJ or OAister.
- Retro digitization
  Result is digitisation of joint Nordic journals, possibly in co-operation with NOP.

Focus Area for Infrastructure and Interoperability (Work Package 3)
The primary purpose is to promote interoperability between different systems in information learning, and scientific environments. The focus area aims to strengthen a co-ordinated development through the digital research libraries and their interaction with the digital universities. The co-operation will guarantee that highly specialized knowledge and know-how regarding standards and technical solutions can be adopted and rendered useful in other environments.

Target Results (Deliverables)
The goal is achieved by means of calls for projects, where the proposed projects must illustrate and as a minimum establish a demonstrator (proof of concept) in the area of standards development. The target result promotes interoperability through Nordic participation in the development of international standards that support and advance researcher and student access to digitized scientific information in the dynamic and global learning and research environment.

- ❑ Standards
  Results are user-centred demonstration projects or networks of excellence that contribute to rendering the research libraries' user services and scientific research information visible in the user environment.
  The areas might be:
    - o Standards for digital archives
    - o Long term filing – hereunder accessibility
    - o Learning objects
    - o The user's mobility
    - o Implementation practices
    - o Integration with user environment

Budget and Financing Model
The programme's budget totals an allocated DKK 10m. This grant constitutes 40 per cent of the total budget, a 60 per cent self-financing being expected. Depending on its application, the total budget may rise to approx. DKK 22.3m spread over a four year period.

Budget Allocation on Work Packages
The budget distributed on work packages, including the self-financing required in the terms of the grant:

Budget	Year 1	Year 2	Year 3	Year 4	Total
Work package 1	500,000	500,000	500,000	500,000	2,000,000
Self-financing	750,000	750,000	750,000	750,000	3,000,000
Work package 2	1,800,000	1,300,000	1,000,000	600,000	4,700,000
Self-financing	2,700,000	1,950,000	1,500,000	900,000	7,050,000
Work package 3	600,000	400,000	300,000	200,000	1,500,000
Self-financing	900,000	600,000	450,000	300,000	2,250,000
Management information sharing and programme meetings	450,000	450,000	450,000	450,000	1,800,000
Total	7,700,000	5,950,000	4,950,000	3,700,000	22,300,000

Programme Management
The programme awards annual grants for development, co-operation, information sharing and coordination necessary to fulfil the purpose of the programme.

Financing Model

The principles of the financing model rest on requirements for co-financing from national or Nordic – public or private – interested parties and project owners.

❑ The Nordbib programme finances maximum 40 per cent of the costs
❑ Self and other financing 60 per cent

The financing requirements for the individual deliverables (projects) in the three work packages will include a requirement for phasing out the Nordbib subsidy proportionally with an increase in self-financing, so that the Nordic collaboration, hereunder developed services and operative solutions etc., is self-financed no later than at the termination of the programme.

Activities initiated by Nordbib and where Nordbib is co-organizer or commissioner may be funded 100 per cent by Nordbib.

Activities of this nature may be:
❑ Organizing workshops
With regard to workshops, Nordbib may pay all expenses for speakers, workshop facilities, board and stay as well as travel expenses for *invited* attendants. Working time spent is regarded as self-financing and this should be disclosed in the accounts.

❑ Preparation of consultancy reports or professional analyses
With regard to the preparation of consultancy reports/analyses, the expenses for the consultant are covered 100 per cent. Should invited experts contribute with knowledge and thus with working hours, this will be regarded as self-financing and should therefore be disclosed in the accounts.

Self-financing

Self-financing may consist of working time (person hours), costs of development environment, technical facilities and licenses, education, and more.

Overheads are handled in the following manner:
❑ Max. 10 per cent of the grant may be used for direct project administrative expenses
❑ Overheads for the mother institution are regarded as self-financing, i.e. they are comprised by the 60 per cent self-financing

Example of calculation:
A project application for DKK 1,000,000
400,000 are granted, of which 10 per cent may be used for direct project administrative expenses
600,000 are self-financing in the form of working time (person hours), costs of development environment, technical facilities and licenses, education, and more, as well as overheads for the mother institution.

Grants may be Used For
❑ Development activities in the form of person hours, travel and meeting/seminar expenses
❑ Initial costs in the form of system licenses for development systems, test systems
❑ Expenses for communication and information sharing in the form of brochures, mock-ups, publishing, conferences

- Evaluation costs in the form of consultancy expenses, person hours, meetings, travels and publishing
- Digitisation in the form of price per unit based on tender/offer
- Analyses, guides, manuals, etc., in the form of person hours and publishing costs
- Direct administrative expenses, although no more than 10 per cent of the grant

See Appendix 1 Overview of Activities Eligible for Grants

Conditions for Grants

Grants are conditioned by

- its purpose and expected result lying within the programme's objectives
- Nordic utility value being rendered visible
- the parties to the project being as a minimum three institutions from as a minimum three Nordic countries
- external evaluation
- final reporting on the project result
- information sharing being conducted according to the plan of action
- budget and plan of action including milestones
- a financing scheme documenting co-financing and self-financing

Unless otherwise agreed, grants are awarded at the termination of the project.

No subsidies

Operation, licenses for electronic information, hardware and maintenance expenses are not subsidized.

Potentially interested parties

Project owners and interested parties may be defined as

- national libraries
- research libraries
- universities
- national digital library projects, research boards and research foundations
- other Nordic programmes such as NOP-HS[1]
- scientific societies, academies and publishers
- companies

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[1] Nordic Board for Periodicals in the Humanities and the Social Sciences (NOP-HS) is currently working on potential projects that may support the process of transition from printed to electronic publishing, see the report 'Fremtidens forskningspublicering – et nordisk samarbejde inklusive projektforslag om en nordisk tidsskriftportal NOP-e.net', prepared by the national library authority and commissioned by the publishing committee 2003-04.

Organization (Programme Management Group and Programme Management)
The national libraries and the major research libraries play an important part in the development, the national digital library projects running the development connected with making digital scientific information accessible through licensing agreements, library portals, digitisation projects and the establishing of digital archives. Therefore, the NORON group (consisting of the Nordic national librarians) have a decisive role to play.

Members of the Board
Erland Kolding Nielsen, Royal Library, Denmark
Gunnar Sahlin, Royal Library, Sweden
Gustav Björkstrand, Nordforsk, Finland
Jens Thorhauge, Danish Library Agency, Denmark
Jon Birger Östby, AMB-utvikling, Norway
Kai Ekholm, National Library, Finland
Kjell Nillson, Bibsam, Royal Library, Sweden
Sigrún Klara Hannesdóttir, National and University Library, Iceland
Vigdis Moe Skarstein, National Library Oslo, Norway
Torkild Vinther, Nordforsk (observer)

Members of the Programme Group
Birte Christensen-Dalsgaard, State and University Library, Danmark
Ingibjörg Sverrisdóttir, National and University Library, Iceland
Jan Hagerlid, Bibsam, Royal Library, Sweden
Kritiina Hormia, National Library, Finland
Svein Arne Brygfjeld, National Library Mo i Rana, Norway
Bo Christer Björk, HANKEN, Finland (research representative)

Programme Manager
Hanne Marie Kværndrup
- secretary for the Nordbib Board
- chairman of the Nordbib Programme Group
- responsible for the daily operations at the secretariat

Secretary
Gitte Krejbich
- secretary
- web manager
- budgetary control

Nordbibs website: www.nordbib.net

Appendix 1

Activities Overview

Locally   Digital archives: Local policies:
- technical solutions   - research registration
- standards   - research communication
- formats   - rights agreements
- access management
- rights management

E-publishing: Concept models:
- workflow   - peer review models
- formats   - publishing models
- tools   - rights management
- models of payment

Nationally   Digital archives: National policies:
- concept models   - research communication
- certification   - research portals
- models of co-operation   - rights management
- technical recommendations   - digitisation

Nordic   Nordic portal: Nordic policies:
- digitisation of Nordic journals   - OA
- e-publishing tools   - quality certification
- recommendations of technical standards   - concept models
- authentification   - rights management
- re-use of technical solutions   - peer view methods
- competence centres/information sharing   - quality assurance

Generally   Conferences
Courses
Seminars
Workshops
Reviews