Request for proposal (NOT VALID ANYMORE)

Finnish Universities user interface / portal project

Helsinki University Library, The National Library of Finland

Helsinki
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1 Introduction

The Helsinki University Library (Helsingin yliopiston kirjasto, HUL) is the National Library of Finland. Its mission is to preserve Finnish cultural heritage and to support and promote Finnish science and research. Another important task is to promote library co-operation both nationally and internationally. HUL co-ordinates the usage of information technology in university libraries and supports the libraries in their IT projects.

The rapid technical development enables the libraries to widen the scope of services available to the users. Finnish university libraries have decided to implement a portal application and a digital library application. Prior to the portal / digital library project, Voyager library system has been implemented in the libraries in a project co-ordinated by the Helsinki university library, which will also co-ordinate the portal / digital library initiative.

The portal will allow the users to access efficiently a large number of heterogeneous data resources, allow description of these resources and provide personified services.

The digital library application will enable storage and retrieval of electronic resources, and grouping of these resources into logical collections.

The portal application must be interoperable both with the integrated library system and the digital library application, to the extent that the patrons will see a single service.

Portal must enable efficient searching of remote databases via Z39.50 or other means; it must be possible to exchange patron data between applications using the NCIP protocol and/or application dependent API's, and all systems must support OpenURL for context-sensitive linking. A more detailed description of the system-to-system interconnectivity requirements is included below.

FinELib, the National Electronic Library, acquires Finnish and international resources to support teaching, learning and research. FinELib negotiates user-rights agreements for electronic resources on a centralised basis for its member organisations. As of 2002, FinELib licenses covered about 120 databases and approximately 8200 scientific journals (Appendix 2.). Helsinki University Library is responsible for FinELib operations and development. At the first phase of the portal project, the portal will be used to access FinELib materials, library OPACs and national bibliographic databases such as article index Arto and university libraries' union catalogue Linda.

The FinELib consortium consists of 102 organisations in 2002 (Appendix 1). All Finnish universities, polytechnics, regional public libraries and several research institutes belong to the consortium.

During the first stage of the portal project only 20 universities in Finland will use the portal, but the portal consortium is likely to grow in the future.

The partner of HUL in the portal project is TietoEnator (www.tietoenator.com). University libraries will participate in the work via the project group and the project management board.

2 General requirements

2.1 Formal structure of the RFP

2.1.1 In this document, requirements are expressed in both narrative and imperative forms. When narrative form or questions are used, vendors are invited to propose a solution.

2.1.2 There are two levels of requirements: *"must"* and *"should"*

2.1.3 To simplify reading of the specification of requirements, *"must"* and *"should"* are shown in italics.

2.1.4 All requirements indicated by *"must" must* be fulfilled. However proposals, which do not meet all mandatory requirements may be accepted. In such cases the vendor *must* indicate some other solution to provide the same service required.

2.1.5 The vendor is requested to follow the order and numbering of this specification of requirements.

2.1.6 The vendor *must* supply a copy of the tender in a machine-readable form on a floppy disc.

2.1.7 The vendor *must* address each of the points raised and indicate to what extent the proposed system meets the requirements, the methods whereby they are met, any extra facilities which can be offered, and any alternatives or improvements offered.

Please answer according to the following model:
- Requirement is fulfilled entirely. Short description of how the requirement is met.
- Requirement is only partly fulfilled. State the reason why.
- Requirement is not fulfilled. State the reason why. The vendor *must* indicate if it intends to develop the requirements and the timetable for development.
- API's to enable development work to be done by third parties (FinELib project) *must* be described in a sufficient detail.

2.1.8 The criteria for the award of the contract will without order of priority be given to the economically most advantageous system in terms of

Functions
Fulfilment of "must" and "should" requirements.
Fulfilment of "must" requirements before the end of 2002.

System
Utilisation of standard products.
Support for standards
Utilisation of modern technology.
Demonstrated system performance.
Demonstrated system stability.

Technology features
Support for multi-vendor machine and operating systems.
Support for multiple methods of search and retrieval.
Support for multiple metadata formats.

Support for exchange of patron and circulation information.
Methods of context sensitive linking.
Methods of authentication and authorization.
Support for standards.
Security.
WAI (Web Accessibility Initiative, W3C).

Functional features
Navigation.
Selection of resources.
Searching.
Refining of search results.
Repetition of a search.
Presentation of search results.
Personification.

Vendor
Vendor stability.
Vendor demonstrated ability to tailor product to new requirements.
Vendor demonstrated ability to deliver on time.

Price
Total costs for the complete portal system.
Running costs (annual maintenance costs).

Support

Other
After-sales services.
Expected further development.
Quality.
References from other organisations with systems installed by the vendor for use as a portal.

2.2 Formal requirements concerning the vendor

2.2.1 Tenders are invited from vendors for the supply of a portal service for the Finnish Universities. The Helsinki University Library will maintain the service. Other organisations may join the consortia in the future.

2.2.2 Tenders *must* include the supply of software (including APIs) and services for a complete portal system in compliance with this document.

2.2.3 The vendor *must* have sufficient documented experience of installation of portal systems as well as experience of customised software applications.

2.2.4 A description of the company, its history, planned future development and main products *must* be included.

2.2.5 Audited financial statements for the last three years *must* be submitted.

2.2.6 Information specifying the ownership structure of the vendor's company and the names of the major shareholders *must* be included.

2.2.7 The following information regarding the vendor's personnel structure *must* be included:

- § Number of employees
- § Number of employees working with the portal product
- § Number of programmers/systems designers working with the portal product

2.2.8 The vendor *must* have a standard system available for testing during the evaluation period free of charge.

2.2.9 A list of portal systems installed (including contact information) and new agreements signed *must* be enclosed with the tender.

Specify the installations used in a consortium and used in a single library. Fill in the following table:

	Consortiums	Single libraries
How many installations use remote databases as their primary search targets?		
How many installations use Endeavour's Voyager as their library management system?		
How many installations use digital library application?		

2.2.10 The vendor *should* be able to point out reference installations of corresponding size, i.e. dozens of target systems and at least 200 simultaneous users (users who have opened sessions to remote databases via the portal).

2.2.11 The vendor *must* state, how the company co-operates with the user group in e.g. sharing the information about target systems and databases.

2.2.12 The vendor *must* clearly state the name, postal and email addresses, and telephone and fax numbers of a contact person.

2.2.13 One company *must* be the main contractor, even if a consortium supplies the system.

2.3 General technical requirements concerning the tender

2.3.1 The major elements and functions of the proposed system must be: knowledge database for description of remote servers, databases and other resources; registered user database; Web-based user interface; Z39.50 gateway and a gateway (or an API for adding one) for non-Z39.50 based remote systems; API or gateway for using several and separate authentication and authorization databases simultaneously; APIs or gateways to local library systems and to digital library materials.

2.3.2 The portal must enable searching directly from target databases (no local indexes).

2.3.3 Any planned further development referred to in the tender *must* be well documented and described together with a time schedule for the implementation.

2.4 Costs

2.4.1 The prices for the complete portal system; all products and services proposed, including licenses, training and maintenance for the next three years *must* be specified and presented in easily readable tables. The table must specify the total cost and the costs of different components, which form the total price.

2.4.2 Also the prices for the development and installation work made by the vendor alone or with the project partners *must* be included.

2.4.3 The vendor *must* specify how concurrent users and sessions are defined. The vendor *must* include the prices for the following numbers of concurrent users /sessions:

500
2000
Unlimited

If the pricing is based also (or instead) on the number of institutions having access to the portal and their FTE values, the price must be set according to the data provided at the Appendix 1. Prices for extending the usage of the portal to the Finnish polytechnics libraries and regional central public libraries (see Appendix 1) must be supplied. It *should* be possible to increase number of licences gradually.

Vendor *must* include the prices for the following numbers of organizations:
20
50
100
Unlimited

2.4.4 The maintenance costs *must* cover any preventive and corrective maintenance. Are there different maintenance levels for example according to the response time?

2.4.5 What kind of help-desk services the vendor can offer? At what price?

2.4.6 Do you offer a guaranteed up time? If so, please describe how and at what price.

2.4.7 The factors used in calculating changes in purchase price and maintenance costs *must* be specified.

2.4.8 The costs for freight and transport insurance *must* be included in the price.

2.5 Delivery schedule and delivery tests

2.5.1 Estimated date of first delivery: 2 January 2003.

The date of first delivery is the date when the product meets agreed specification. The actual delivery inspection and testing period precedes this date and the actual delivery is expected to take place 6 weeks prior to the first delivery date.

2.5.2 Helsinki University Library considers the system to be delivered when:

- The portal software is installed and running
- Tests have been carried out to verify that the standard portal product meets the criteria of the RFP

2.5.3 A date *must* be specified indicating when the system (hardware) *should* be ready to be put into operation.

2.6 System test

The purpose of the system test is to verify that the library system's software fulfils the functionality and response times specified in the contract.

The conditions applying to the system test must be specified.

2.7. License

The vendor must grant to the Helsinki University Library and FinELib consortium a non-exclusive, irrevocable right and license to use the supplied system as described in the enclosed Request for proposal.

2.8. Copyright

The vendor *must* ensure that the supplied system, hardware or software, does not infringe on any other party's rights (patent, trademark, design, copyright etc.). If a third party makes a claim, the vendor *must* represent The Helsinki University Library in consequent negotiations or legal proceedings. The vendor is liable for the costs incurred by Helsinki University Library if this happens.

2.8 Applicable law

2.8.1 The rights and obligations of the parties specified in the contract are to comply with Finnish law only.

2.8.2 Disputes regarding the interpretation of the contract *must* be decided by arbitration in Finland pursuant to the Finnish law in force at any time.

2.9 Conditions of payment

Payment will be done in three parts: 1) after signature of the agreement, 2) after the first delivery of the software and 3) after the final acceptance of the product. The vendor should suggest how the payment would be divided into three parts.

3 Warranty and maintenance agreement

3.1 Warranty

3.1.1 The tender *must* specify what the warranty covers, and the terms and conditions of the warranty *must* be described. The warranty is expected to guarantee that the system has the capacity and the functions specified in the contract.

3.1.2 The warranty *must* be valid from the date of the system test acceptance.

3.2 Maintenance agreement

Maintenance *must* be guaranteed for 5 years.

3.3 Support

Describe your software support after the implementation phase, especially support for possible FinELib specific tailoring.

4 Training and documentation

4.1 The methods and a schedule for training *must* be clearly specified in the tender. Education and training concerning the functionality of the portal is expected to be given to a small number of Helsinki University Library staff and the project partners involved in the development process. Also education and training concerning the APIs of the product is expected to be given to the HUL technical staff and the project partners.

4.2 The training *must* take place in Helsinki.

4.3 The vendor *must* describe the training to be provided.

4.4 The initial training recommended by the vendor *must* be included in the purchase price of the system and specified as to number of days and type.

4.4 It *must* be the vendor's responsibility to provide detailed documentation for all applications/modifications developed especially for Helsinki University Library.

5 General system requirements

5.1 Hardware configuration

The hardware is to be supplied by Helsinki University Library.

5.1.1. The system *must* support multi-vendor machine and operation systems.

5.1.2 It *must* be possible to run the portal software on UNIX-servers (preferably 64-bit processors from SUN Microsystems). The portal should also support usage of clustered UNIX servers, where clustering is done with switch (e.g. Alteon ACEdirector) hardware optimised for SUN server products.

5.1.3 Which other hardware platforms does the application support?

5.1.4 The vendor *must* propose a suitable hardware and system software configuration for the system. As a basis for the recommended configuration, use the concurrent users specified in 2.4.3.

5.1.5 Other specifications that *must* be stated:
- Hardware requirements for the session timeouts of 30, 60 and 90 minutes.
- Possible restrictions on the number of simultaneous databases to be searched must be specified.
- Possible restrictions on the number of items in the result sets must be specified.

5.1.6 The vendor *must* guarantee that the system will run on the recommended configuration and accept that it is the sole responsibility of the vendor to solve possible problems concerning hardware/server software interaction.

5.1.7 The design of the system and the proposed hardware configuration *should* make it possible to run the system 24 hours a day seven days a week.

5.2 System utilities, system administration and maintenance

5.2.1 The vendor *must* support Helsinki University Library and its partners in implementation and customisation.

5.2.2 The vendor *must* describe the technical and contractual features that facilitate the usage of application in a consortium setting.

5.2.3 All software needed for systems maintenance *must* be listed.

5.2.4 The additional software components (DBMS, HTTP server, compiler) needed by the portal application *must* be listed.

5.2.5 There *must* be easily used shareware or commercial UNIX tools for monitoring the systems load to give an early alert if hardware upgrading is necessary.

5.2.6 The system *must* provide a variety of access levels and capabilities, including the ability for Helsinki University Library system operators and partners to access OS features directly, to obtain and modify file listings, resource allocations, and security features and functions.

5.2.7 It *must* be possible to perform background activities such as database updates while the system is running without degrading system performance to a noticeable degree.

5.2.8 A description of the techniques used (e.g. programming language(s), databases, APIs) *must* be included. Also specify for what purpose each of the techniques are used.

5.2.9 Description of the methods used to deliver usage information (statistics) *must* be included.

5.3 Backup and recovery

5.3.1 The vendor *must* recommend a method for complete backup of the system and specify which type(s) of backup devices/media that have been successfully tested with the system.

5.3.2 It *should* be possible to back up all disk space in one unattended session.

5.3.3 The system *must* include fully functional routines for restarting the system after a major system crash.

5.3.4 The necessary reconstruction of databases and indices *must* be carried out and database integrity preserved.

5.4 Access and security

5.4.1 It *must* be possible to create individual users and passwords.

5.4.2 It *must* be possible to specify a user class “guest” with limited access to the system.

5.4.3 Unauthorised attempts to update the database or carry out other operations *should* be logged.

5.4.4 Some form of safe authentication in an open network environment (in the minimum case, IP number based access control) *must* be offered. Please describe the options available.

5.4.5 APIs, which enable usage of external user identification data, *must* be described. LDAP must be supported. It *must* be possible to use several different and separate authentication and authorization databases simultaneously.

5.4.6 It *should* be possible to load and extract patron data as defined in the NCIP standard.

5.4.7 A detailed description of the authentication methods and access level functions *must* be provided.

5.4.8 It *must* be possible to allow access on the basis of IP and/or network address only.

5.4.9 It *must* be possible to allow certain users, but not others, to add, modify and delete information about the target systems and databases.

5.4.10 It *must* be possible to update the user and access tables through the programming interface. The patrons *must* always see only those target systems / digital library resources they are entitled to use.

5.4.11 It *must* be possible for the registered users to maintain their personal interest profiles. To what extent can the administrative services such as password changes be left to the registered patrons.

5.4.12 The user interface *must* support using secure https protocol, at least on the personalized or user information related sections.

6 Application specific requirements

6.1 User interface

6.1.1 It *must* be possible to create several user interfaces (e.g. for each participating organization). The vendor *must* specify how this can be done.

6.1.2 It *must* be possible for the patrons to access the portal with Internet Explorer 5.x or later version, and with Netscape Communicator 4.5 or later. Please list the supported browsers.

6.1.3 It *must* be possible to modify the looks and structure of the user interface.

6.1.4 The portal software *must* enable free navigation within the portal, or provide means for adding this functionality. The vendor must describe how navigation in the system is organized and what kind of tailoring possibilities there are.

6.1.5 The portal *should* collect search history and allow repeated searches.

6.1.6 The portal *must* include logout functionality and timeout parameter. Previous search results should be available for the user preferably for 90 minutes or more. Required minimum timeout is 30 minutes. This must be taken into account for the hardware requirements (see 5.1.3).

6.1.7 There *must* be a staff interface for maintaining information about target servers, databases, collections and user rights.

6.1.8 There must be a staff interface for maintaining information about target servers, databases, collections and the authentication and authorization data.

6.1.9. The user interface *must* enable permanent personal storage of queries and query results (virtual bookshelf). The vendor *must* specify how these groupings can be modified and how new resources can be added. The vendor *must* also specify how references can be saved into separate reference management systems (e.g. EndNote).

6.1.10 The portal *must* enable grouping of resources on the basis of at least subject or material type. These groups must be modifiable**.**

6.1.11 It *must* be possible to search from one database only or in parallel from an unlimited number of target databases.

6.1.12 It *should* be possible to map between, or combine, semantically identical search terms regardless of the type of collection, formats, protocol or syntax used**.**

6.1.13 The portal *must* support the Z39.50 servers using search functionality specified in the Bath profile. The vendor *must* describe the features of the Bath profile supported by the application.

At least the following search functionalities *must* be supported:
- several search terms
- combination with Boolean operators
- search by phrase
- right truncation
- relation attributes for numeric searches

6.1.14 The vendor *must* describe how HTML and XML based searches are supported.

6.1.15 It *must* be possible to use the target system's own user interface as an alternative to the portal's own interface.

6.1.16 The portal *must* enable context sensitive linking based on the OpenURL standard into the digital library application and other remote targets.

6.1.17 The portal *must* support multilingual user interface (Finnish, Swedish, English), including multilingual help texts.

6.1.18 The portal *must* be capable of converting UNICODE and LATIN-1 character sets on the fly for searching and record display purposes.

6.1.19 The portal *should* indicate the session status separately in each target database (e.g. Connecting – Searching – Retrieving records).

6.1.20 The portal *must* enable searching directly from target databases (no local indexes).

6.1.21 The end user interface *should* conform to the WAI recommendations of W3C, level A (at least priority 1 checkpoints).

6.2 Processing of result sets

6.2.1. The portal *must* create a combined list of the total hit counts when searching multiple databases.

6.2.2. It *must* be possible to browse the results from each database separately.

6.2.3. It *must* be possible to display the results in different forms (long / short). These forms *should* be configurable by the system administrators.

6.2.4. The portal *must* support display of UNICODE characters. Please provide the list of character sets supported by the portal.

6.2.5. The portal *must* support LATIN-1 character set. In the user interface 8-bit characters *must* display correctly and it *must* be possible to use them in search terms.

6.2.6. The portal *must* allow display of full text (the resources themselves) in addition to the bibliographic data.

6.2.7. The portal *must* be able to download and store chosen records in different formats (EndNote, Reference Manager, .txt file), print them or send them via email.

6.2.8. The portal *should* be able to browse a finished result set from one target database while other searches are still being processed.

6.2.9. It *should* be possible to sort a result set(s) according to title, author or date/year.

6.2.10. The portal *should* be capable of removing duplicate records from the result set, especially in case a single result set is displayed.

6.2.11. It *must* be possible to show the real number of hits per target database.

6.3. Data communication

6.3.1 The system *must* be able to communicate via HTTP, Z39.50 and XML protocols.

6.3.2 Any private extensions made to these protocols *must* be mentioned and their functionality *should* be described. It *must* be possible to add new gateways and protocols to the product, and configure the usage of the existing ones. How is this done? Please describe.

6.3.3 Any other (vendor-specific) means used for making queries from remote system *should* be described in sufficient details.

6.3.4 The system *must* support OpenURL. Please describe which other linking solutions the system supports.

6.3.5 The system *must* support OAI for extraction and load of metadata.

6.3.6 The system *must* be able to process different types of bibliographic records (including MARC21, MARC21-fin and Dublin Core; FINMARC *should* be supported). Any other supported record syntaxes (additional MARC formats, ONIX) *must* be described. The format used for collection description *must* be described as well.

6.3.7 The vendor *must* describe the technique used for input & storage of metadata on target systems, databases and collections into the portal application, and the APIs that can be used for batch loading of this data. If descriptions of target systems and databases are already available, the vendor must provide a list of them.

6.3.8 It *must* be possible to share metadata on target systems, databases and collections with other sites using the same portal application. Please describe the technical and political procedure used for the metadata interchange. Is there a “master” database from which the target database/collection related metadata could be used or copied to local portal implementations?

The vendor *must* describe the method and frequency of metadata updates provided by the vendor.

6.3.9 The vendor *should* describe how access to journal titles is organised and how it is possible to search journal titles according to different search criteria, for ex. title, subject, publisher.

6.4 Response times

6.4.1 Processing a result set less than 100 records from a single remote database *should* not require more than 5 seconds.

6.4.2 It *should* be possible to carry out tasks with low priority in the background, e.g. maintenance of the target system, database and collection information. Please describe the possibilities and how they work?

6.4.3 The supplier *must* guarantee that in any four-week period, the up-time availability of the system will not fall below 98 % with all hours round the clock counted.

6.4.4 Furthermore the system uptime *must* not fall below 99% during any 365-day period. This will allow 14 hours' downtime per month and 87 hours' downtime per year.

6.4.5 Future development plans and timetables

The vendor *must* describe the major development plans for the future and the timetable applied.

Appendix 1. Members in FinELib consortium.

Appendix 2. List of licensed resources

URL: http://www.lib.helsinki.fi/finelib/hankkeet/portaalirfp.html