



Requirement specification

Reading List System

(Sikt 26/00005)



Table of Content

1	About the customer	4
2	How to complete the requirement specification.....	5
3	Definitions.....	7
4	Expectations for the Procurement.....	8
5	General requirements.....	10
6	Operations and platform	11
7	System Architecture	12
8	Data ownership.....	12
9	Integrations.....	13
10	User accounts and user management.....	16
11	Authentication.....	17
12	API-authentication	18
13	Automation and AI	18
14	Information Security and Privacy	20
15	System security and encryption	21
16	Accessibility	22
17	Usability.....	23
18	Statistics and reports.....	24
19	Functional requirements	25
19.1	General functionality.....	26
19.2	List creation and management.....	27
19.3	Rollover	28
19.4	Digitization and copyright	29
19.5	Resource availability.....	30
19.6	Central management and group functionality	31
19.7	User interface.....	31
19.8	Communication	33
19.9	Alphabetizing/sorting.....	34
19.10	Data import and export.....	34
20	Services.....	35
20.1	Implementation and Onboarding.....	35
20.2	Support.....	36
20.3	Training and documentation	37

Kommentert [A1]: Er det bevisst at overskriftstrukturen er endret?

Kommentert [A1R2]: Ja, ønsket å forenkle litt.

Requirement Specification: READING LIST SYSTEM (SIKT 26/00005)



20.4	Test environment	38
20.5	Service Level Agreement (SLA)	39
20.6	Availability and performance	39
20.7	End-of-Contract Provisions.....	40
20.8	Future Development / Roadmap.....	41
21	Options	42
22	Price	43
Appendices to the requirement specification		45



1 About the customer

About the Customer

This procurement is carried out by Sikt on behalf of libraries and institutions within the knowledge and research sector in Norway.

Sikt - Norwegian Agency for Shared Services in Education and Research, is a state-owned agency that develops, procures, and delivers digital services for education and research. Our mission is to ensure that all individuals in the education sector have access to secure, stable, and integrated services and infrastructure.

We cater to over 220 institutions involved in research and education providing a wide range of services and systems, in addition to consultancy. Our goal is to transform ideas into solutions, creating secure, stable, and coherent services that enhance both education and research. Sikt and the libraries support the institutions' goals of open research by enabling the sharing of data and publications, facilitating collaboration and knowledge exchange across disciplines and institutions, and encouraging researchers to contribute to open-source projects that promote innovation and transparency.

Sikt acquires and administers library services on behalf of the BIBSYS Consortium. The consortium consists of approximately 80 institutions within the knowledge sector in Norway, comprising all Norwegian university libraries, the National Library, university college libraries, medical libraries, museums, and a number of research libraries and institutions. The sizes of the different consortium members range from a few employees to large institutions (such as universities) with many employees and a hierarchical structure.

A subset of the institutions uses the reading list solution provided by Sikt and these institutions form the reading list consortium. See appendix A in this document for a list of the current members of the reading list consortium.

About the Reading List Consortium

The reading list consortium was formed in 2017 and uses Leganto from Clarivate as the reading list system. In addition, the BIBSYS consortium uses Alma from Clarivate as the Library Services Platform (LSP) and Primo from Clarivate as the discovery tool. Each institution has its own instance of the reading list system.

Delivering high-quality, cost-effective systems through collaborative solutions is the cornerstone of Sikt's strategy. These joint solutions not only enhance operational efficiency, but also encourage a culture of collaboration, which is fundamental to the consortium.

Sikt acts as the primary focal point for support to the institutions within the consortium. All communication with the Supplier will go through Sikt. Sikt arranges webinars, establishes relevant documentation and guidelines, and provides general support for the consortium related to the products.

Sikt is central in facilitating the reading list system on behalf of the consortium by maintaining shared practices and to some extent standardized policies and configuration.

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



Sikt also sets up and maintains internal and external integrations with other services and systems related to the library services. There are eight active integrations in use today related to the reading list system. See appendix B of this document for a complete list.

Therefore, a system with an open, API-based infrastructure that provides access to necessary APIs, supports data import and export, and uses established web and library-domain standards is a key success factor.

For additional information about the current library services please visit:
<https://sikt.no/omrade/bibliotektenester> (webpage in Norwegian).

Key figures for the reading list consortium:

Number of institutions	28
Number of Full-Time Equivalents (FTEs)	138 750
Number of instructors 2025	11 400
Number of courses 2025	16 100
Number of reading lists 2025	14 250
Number of citations 2025	244 900
Number of reading list views 2025	4 962 200
Number of full-text views 2025	2 348 400

2 How to complete the requirement specification

The Supplier will answer the requirements of this document in the corresponding sections of tender document 3: *Supplier's Answers to the Requirement Specification*. This will constitute the main part of the supplier's response.

There are several appendixes that contain more extensive information about certain aspects of our current ecosystem, integrations and requirements.

List of appendixes:

- A – List of institutions
- B – List of current integrations
- C – Bulk copyright clearance integration
- D – User stories
- E – Online transactions definitions
- F – FS import file format

Requirement Specification: READING LIST SYSTEM (SIKT 26/00005)



All appendices are enclosed in tender document 11: Requirement specification appendices.

Tender Document 3 *Supplier's Answers to the Requirement Specification* repeats the requirements from the list of requirements below, with corresponding requirement numbers and text boxes where the supplier give their answers. Some requirements that necessitate a written response may include additional guidance on how to answer in Document 3. The requirements are categorized in the following way:

Minimum requirements (M)

Minimum requirements are requirements that the Supplier must comply with. The supplier must therefore clearly state "YES" or "NO" per M requirement. Deviation from a minimum requirement may lead to rejection of the tender in accordance with the Norwegian public procurement legislation.

Certain minimum requirements require a written description of how the supplier fulfills the requirement and is marked with "M*". The written response will not be evaluated as part of an evaluation criteria but used to document and review fulfillment of the minimum requirement it refers to.

The minimum requirements should be met by February 1st, 2028, meaning that a supplier can answer "YES" (compatible) if there is a timeline for compliance before this date. The supplier must clearly state "YES", "NO", or "IN DEVELOPMENT" for these requirements. If "in development" is checked, the supplier must provide the date when the development work is expected to be completed.

Evaluation Requirements (E)

Evaluation requirements should be answered clearly and adequately detailed. [Links to external sources will not be evaluated. Appended documents will only be evaluated for requirements where these specifically are called for.](#)

There is a maximum limit on the length of the answer to each requirement, described in the tables below. [Text exceeding the maximum lengths will could affect how the requirement is evaluated.](#) The supplier can add illustrations, figures and screen captures where appropriate. This does not count towards the maximum length requirement of answers.

The supplier will be asked to respond to certain requirements in separate documents. It will be clearly referred to how and in which attachment such requirements should be answered.

Desirable requirements (D)

Desirable requirements are requirements that the Customer wishes the chosen service to comply with. The supplier must clearly state "YES", "NO", or "IN DEVELOPMENT" for these requirements. If "in development" is checked, the supplier must provide the date by which the development work is expected to be completed.

Desirable requirements will be evaluated as part of the evaluation criterion they are connected to.

A response that the system allows the Customer to develop the functionality themselves will not be considered a valid response to a requirement. The fact that a system has open architecture and API's and thus gives the possibility to interact with the system in various ways will be given credit in the chapter that addresses this area, but not in the functional requirements to the system.



3 Definitions

Administrator: An employee who performs tasks related to the management, configuration, or operation of the service in the solution.

AI: Artificial Intelligence

Analytic (or Analytical entry): A specific part of a larger document or collection — such as a chapter, article, or individual contribution — that is described or catalogued separately from the whole. Analytics are the subject of analytical cataloguing or analytical indexing, where the aim is to provide access to constituent parts of a resource rather than to the resource as a whole.

BIBSYS Consortium: Roughly 80 academic research institutions constituting a consortium managed by Sikt, covering about 200 circulation desks.

Citation: The individual entity on a reading list: a structured reference to a specific resource or part of a resource (such as a book, article, chapter, web page, or video) that includes metadata and access information, and provides the details needed to identify, locate, and access that resource.

Course: A unit of teaching and learning, identified by a unique course code and title, functions as the primary organizational entity to which one or more reading lists are attached and through which students gain access to required and recommended learning resources.

CRUD: Basic API operations on database records (create, read, update, delete).

Discovery System: A library search system that allows users to search across the library's collections and resources from a single interface. In the context of our reading list system, it serves as a source from which citations can be imported directly into reading lists.

FTE: 60 ECTS points produced during the course of a year. Total number of FTE = total number of ECTS points produced / 60

GDPR: General Data Protection Regulation. A comprehensive set of data protection laws enacted by the European Union to safeguard the privacy and personal data of individuals within the EU.

Institution(s): An individual customer institution within the reading list consortium, subscribing to and using the reading list service.

Link resolver: A tool that facilitates access to the full text of documents by connecting citation information with the appropriate library resources or databases.

LSP: Library Services Platform.

MFA: Multi Factor Authentication.

OOTB: Out Of the Box.

Reading List: A curated collection of learning resources (such as books, articles, book chapters, websites, videos, and other materials) selected and organized by teaching staff to support a specific course. It consists of one or many citations. A reading list belongs to one or multiple courses.

Rollover: Process of copying existing course reading lists and associating them with new courses for a new term, including their citations and selected associated data (like copyright records, tags, and notes), according to library-defined rules.

SaaS (Software as a Service): A cloud-based software delivery model in which applications are hosted and maintained by a provider and accessed by users over the internet without the need for local installation or infrastructure management.

SLA: Service Level Agreement

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



The reading list consortium: 28 academic research institutions using the reading list solution provided by Sikt, constituting a consortium managed by Sikt.

The solution: The reading list system/platform to be procured.

Supplier: Reading list system supplier.

User:

- **Staff user** - Authorized to use the LSP for delivering library services. Mostly library staff and IT staff, including Sikt administrators
- **Patron** - User of library services. It can be students, researchers, academic staff, including library staff.
- **Instructor** - A member of teaching staff responsible for a course. As part of this role, the instructor is responsible for the academic content of the course's reading lists.
- **List creator** - A user who creates or manages reading lists. This role applies to both instructors and librarians.
- **Librarian** - A staff user who supports instructors in creating and managing reading lists, and who is responsible for the library-related administration of the reading list service.

WAD: Web Accessibility Directive

WCAG: Web Content Accessibility Guidelines. Recommendations for making web content more accessible.

4 Expectations for the Procurement

The reading list system is seen as a part of the total digital environment within the higher education sector in Norway. In this document, we outline the key needs that the reading list system should support.

The objective of this procurement is to purchase a modern reading list system that is built on a Service-Oriented Architecture and is adaptable and can be easily integrated and modified to suit the consortium's needs. The system must be based on technology that has an expected lifespan of at least a decade.

The reading list product to be offered must be in full-scale operation at other institutions at the start of this tender process. Reading list solutions that are still in development and only have "early adopters" will not fulfill this requirement. It is also expected that the systems are in continuous development and that they continue to evolve and adapt regarding functionality, technology, and future needs and requirements. There is especially an expectation that artificial intelligence/generative AI will be an integrated part of the deliveries, either already or in the near future.

An important aspect of the system is its support for Diversity, Equity, Inclusion, and Accessibility (DEIA). A DEIA-compliant system ensures that all users, regardless of background, ability, or identity, can access and benefit from its functionality on equal terms.

It is essential that the reading list system handles all media types in a uniform way, regardless of format or acquisition process. This uniform management should not only be visible at the user interface but also be reflected by the underlying services. The reading list system must provide a platform with services that will enable Sikt to implement the extensions needed by the consortium.

There will be institutions within the consortium with little or no resources to configure and maintain the system locally. Thus, the system should allow Sikt to configure a group of institutions centrally in bulk in an easy and efficient manner.

Requirement Specification: READING LIST SYSTEM (SIKT 26/00005)



SIKT aims to procure a reading list system that considers the general needs of the consortium:

- The solution must be user friendly and with an intuitive design.
- The solution should provide a seamless experience.
- The solution should be perceived as holistic with all the core information and functionality users need.
- There should be good opportunities for customization for the users.
- The solution should follow recognized standards and have good opportunities for integration.
- The solution should have transparent and ethical AI support that can enrich the service, but which can also be turned off.
- The solution should include analytics functionality to support reports, analysis and data-driven decisions.
- The solution should be accessible and follow standards for accessibility.
- Data ownership and data processing should be well described.
- The solution should be compatible and provide opportunities for integration with tools and systems that are widely used within and outside academia.

The governance model must support institutions to join or leave the consortium during the contract period.



5 General requirements

This chapter describes the overall requirements for the supplier and the solution in connection with the procurement. The requirements include both environmental and technological conditions intended to ensure that the system supports the institution's objectives for sustainability, quality, and modern operations.

There will be a test of the product during the evaluation/negotiations phase and the result will be an important factor in the awarding process. Appendix D describes various user stories related to the system. The suppliers will be asked to demonstrate some of the user-stories as part of the system demonstrations.

No.	Requirement	Max. length (pages)	Type (M/D/E)
001a	The Supplier MUST have an established policy and a documented approach for delivering services in a manner that is environmentally sustainable and that contributes to reducing the climate and environmental footprint of its operations. DESCRIBE the Supplier's policy, governance and concrete measures, including any relevant environmental certifications (e.g. ISO 14001, EMAS) or equivalent documented management systems.	1	M*
001b	The cloud/SaaS infrastructure used to deliver the service, including all production data centres and any data centres used for backup, MUST be powered by renewable electricity. The Supplier MUST document the renewable energy share for the relevant data centres and the basis for this documentation (e.g. supplier energy mix, guarantees of origin, or equivalent). DESCRIBE.	0.5	M*
001c	The data centres used to deliver the service MUST operate at a documented annual Power Usage Effectiveness (PUE) at or below an industry-standard level for modern facilities. The Supplier MUST state the PUE for the relevant data centres and the measurement basis. DESCRIBE.	0.25	M*
001d	The Supplier MUST, on request and at least annually during the contract period, provide reporting on the environmental performance associated with the delivery of the service. As a minimum, the reporting MUST cover the energy source and renewable share for the data centres used, and the Supplier's measures to reduce energy consumption and the overall environmental footprint of the service. DESCRIBE the scope, format and frequency of such reporting.	0.5	M*
001e	The Supplier MUST commit to a contractual obligation to maintain or improve the environmental performance documented in the tender throughout the contract period, and to notify the Customer of any material change to the energy source, data-centre location or environmental profile of the service.	YES/NO	M

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



001f	DESCRIBE the Supplier's roadmap and concrete planned measures for further reducing the climate and environmental footprint of the service over the contract period, including any targets, timelines and third-party verification.	0.5	E
002	The system MUST be based on technology that has an expected lifespan of at least a decade. DESCRIBE any limitations regarding technology and expected lifespan.	0.25	M*
003	DESCRIBE how the interface relies on the use of style sheets, Java scripts, cookies and possibly other technologies for extending interface functionality.	0.5	E
004	It SHOULD be possible to alter the interface by editing existing CSS and HTML files.	YES/NO	D
005	The system MUST run on up-to-date versions of the most common browsers.	YES/NO	M
006	The solution MUST support the Internet Protocol version 6 (IPv6). This includes both connections to clients and to any other external system it interacts with.	YES/NO	M

6 Operations and platform

We are looking for a reading list solution provided as a cloud service (SaaS – Software as a Service). We expect each institution to have access to their own instance of the system. The institutions in the consortium should not be able to access or view data or configuration from other institutions.

All data submitted to the solution belongs in its entirety to the institution and/or the users of the reading list system, and processing should occur within the EU/EEC, in compliance with the provisions set forth in the General Data Protection Regulation (GDPR). Any processing of customer data outside the EU/EEC must be covered by valid transfer mechanisms.

The institutions within the consortium included in the tender vary in size and academic profile and their needs from a reading list system will vary accordingly. However, the consortium has a shared commitment to usability and accessibility, and we are looking for a modern, adaptable design that supports flexibility in use for front-end users (e.g. students) and back-end users (e.g. academic staff and librarians). We are also looking for a solution that allows each institution to customize according to their institutional needs and preferences, both in terms of branding and the functionality available within the solution.

The solution will need to accommodate both smaller institutions with little to no need for customization beyond custom branding, as well as large institutions which may have their own IT development teams and a high demand for customization and API access.

No.	Requirement	Max. length (pages)	Type (M/D/E)
007	The solution MUST be a cloud-based/SaaS service hosted within the EU/EEA region.	YES/NO	M

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



008	The solution MUST be multi-tenant, with each institution having its own separated instance within the multi-tenant structure.	YES/NO	M
009	DESCRIBE the hosting operational environment, including failover capabilities and any single points of failure.	0.5	E
010	The supplier MUST have a reliable data backup and a disaster recovery plan to mitigate data loss in the event of a disaster or system failure. DESCRIBE.	0.5	M*
011	The supplier SHOULD have a transparent and well documented scheme for testing and deploying upgrades. DESCRIBE the process for testing and deploying upgrades to the solution, including network considerations and the role of subcontractors.	0.5	E
012	The proposed solution MUST be ready for use before January 1, 2028.	YES/NO	M

7 System Architecture

It is expected that the reading list system will have a service-oriented architecture and provides shared, reusable services, with loose couplings. Data should be accessible across systems, rather than exported from, or imported into, each system of the enterprise.

The Reading List system should emphasize the separation of applications and business services and there is a need for access to services at different levels. Sikt will use these services to implement extensions. It should also be possible to integrate with external systems at any level.

No.	Requirement	Max. length (pages)	Type (M/D/E)
013	Sikt or institutions MUST be able to implement extensions and integrate the Reading List system with external systems. Please DESCRIBE the Reading List system architecture and how this can be achieved.	0.5	M*
014	The supplier MUST provide a list of supported open-standard protocols and standard export formats. If there are any plans to support new standards in the future, please state when these will be supported.	0.5	M*
015	The supplier MUST describe and provide documentation of non-standard protocols and export formats.	0.5	M*

8 Data ownership

It is crucial that all data within the system is the exclusive property of Sikt and the consortium. This encompasses a variety of data types including but not limited to:

- Content such as syllabus information, course information, reading lists, citations and user information
- Usage data, which is derived from system utilization
- Statistics/reports generated within or by the system
- Metadata

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



- Implied data inferred from other data elements in the system
- Other related data forms

The supplier is not permitted to access or use the data within the system for purposes other than delivering the agreed-upon services and support, without explicit consent from Sikt. For instance, any data usage for benchmarking against other institutions would require prior approval.

The Norwegian government wants public data and digital content that is publicly funded, to increasingly be available to everyone. It is stated in the guidelines to governmental institutions that their data should be available in machine-readable formats. It is strongly suggested that the data should be licensed with an open and free-to-use license. A Norwegian national license (NLOD¹) has been created for this purpose.

As governmental institutions with governmental funding, the vast majority of the member institutions in the reading list consortium, along with Sikt itself, are affected by these guidelines and therefore obligated to make metadata and other relevant datasets, like reading lists and citations, available and licensed.

No.	Requirement	Max. length (pages)	Type (M/D/E)
016	All data within the system MUST be the property of Sikt and the consortium.	YES/NO	M
017	The supplier MUST agree that they are not permitted to access or use the data within the system for purposes other than delivering the agreed-upon services and support, without explicit consent from Sikt.	YES/NO	M
018	It MUST be possible to license the metadata in the Reading List system with NLOD and other appropriate licenses of choice.	YES/NO	M

9 Integrations

Integrations are crucial to the reading list system. The institutions and Sikt need to integrate the system with other software in use by the consortium, both by embedding, extracting or inputting data into the reading list system. Examples of necessary operations are the import and update of users, the export, import and update of syllabus and course information, reading lists and citations and reuse of citation metadata into other systems.

The sector follows an integration policy which states that integrations should be API- and event-based. Therefore, we expect the solution to have a modern, rich and well-supported API suite which Sikt and the sector can utilize to develop integrations and dataflows with other services and platforms across the digital ecosystem. We also expect that the system can scale according to needs and that there are no practical limitations on the usage of APIs.

¹ NLOD --- Norwegian License for Open Government Data (<https://data.norge.no/nlod/en/2.0>)

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



The reading list system must be able to interact with and share data with other relevant systems as long as these external systems follow the same architectural principles offering services/APIs, protocols, etc. The reading list system should support common standards in the library domain and in the education and research sector. It would also be beneficial if the system could offer solutions for low-code/no-code integrated within the system in order to ease the creation of workflows and integration without the need for a high level of coding expertise.

A key requirement is having the option to display a reading list directly in the LMS (e.g. Canvas, Moodle and Blackboard). This integration ensures that students can access all required and recommended course materials without leaving their primary learning environment.

The integration with the copyright clearance system Bolk is of utmost importance. Bolk is used by Norwegian higher education institutions to manage and clear copyright permissions for course materials, ensuring that digitized and distributed content complies with applicable copyright legislation. When the reading list system is integrated with Bolk, copyright clearance can be handled as part of the reading list workflow, removing the need for manual processes and reducing the risk of copyright infringement.

This chapter has one requirement related to this integration. For requirements regarding Bolk and copyright clearance management, see 4.1.2 – Digitization and copyright.

See Appendix B for a list of current integrations.

Sikt imports data from the Norwegian student information system FS to the reading list system on a regular basis. For details, see Appendix F – FS import file format.

No.	Requirement	Max. length (pages)	Type (M/D/E)
019	The solution MUST have an open and documented API-suite that leverages modern API standards.	YES/NO	M
020	The solution MUST have real-time APIs to enable provisioning and management (CRUD) of course information, reading lists and citations.	YES/NO	M
021	List and DESCRIBE which standards and protocols (e.g. SOAP, REST/RESTful, GraphQL, SCIM etc) that are currently supported by the solution's API-suite, and the most relevant use cases for Sikt.	0.5	E
022	DESCRIBE if and how the solution supports sending out event notifications or other forms of messages when changes occur in the platform's source data (e.g. webhooks) and which events are supported.	0.5	E
023	The data model for the solution SHOULD be fully documented, and the documentation should be available to the customer as an aid to building integrations, reporting functions, etc.	YES/NO	D
024	Detail and DESCRIBE the performance metrics of the API-suite, including response times and any rate limiting or other operational limitations.	0.5	E

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



025	If there are general upper limits defined for API-usage the supplier MUST be willing to increase the amount if necessary to enable Sikt and the consortium to achieve their goals and cover the needs related to the API's.	YES/NO	M
026	Outline and DESCRIBE any planned or future expansions or improvements to the API that are currently in development or under consideration.	0.5	E
027	APIs and services SHOULD be available via HTTPS and respond with XML or JSON.	YES/NO	D
028	DESCRIBE the process for maintaining and developing new functionality in the API-suite, including whether and how customers may report their needs for future API functionality.	0.25	E
029	MUST DESCRIBE what parts of the solution are not covered by APIs.	0.25	M*
030	SHOULD be possible to show what is on the syllabus in the discovery system (Primo/Oria). Material that is in one or more lists SHOULD link to these from the discovery system record.	YES/NO	D
031	MUST be able to integrate with the copyright clearance system Bolk. DESCRIBE what is needed to enable this integration. (Key features are the reusability of metadata from Leganto to create requests in Bolk, and the display/upload of files from Bolk into Leganto when relevant). See Appendix C.	0.5	M*
032	It MUST be possible to import courses from FS or from a file. See Appendix F. DESCRIBE	0.5	M*
033	Courses MUST include the following data: code, name, department/faculty, course year, start and end date, alternative/short course codes, instructors, campus(es), number of participants, term (autumn, spring, summer).	YES/NO	M
034	It MUST be possible to run a test job before courses are actually rolled over and/or created.	YES/NO	M
035	Whether it is a test import or the actual job, the job log SHOULD show how many courses were created/rolled over and which errors or missing elements were discovered. DESCRIBE.	0.25	E
036	It SHOULD be possible to import name and code from FS for faculty, department, study program and course, and reflect the hierarchy in the reading list system.	YES/NO	D
037	Since Sikt retrieves the code of the associated faculty or department for each course, the system MUST be able to match these codes to the corresponding faculty/department names and display the names where relevant.	YES/NO	M
038	It MUST be possible to register alternative course codes (for example a long form and short forms) for each course, all forms being equally searchable.	YES/NO	M
039	The main course code MUST be unique, but alternative forms can be used on multiple courses.	YES/NO	M
040	It MUST be able to include/display a reading list directly into an external webpage.	YES/NO	M
041	The system MUST have support for LTI to be able to display a reading list directly in the LMS (e.g. Canvas, Moodle and Blackboard).	YES/NO	M
042	MUST support LTI v.1.3	YES/NO	M

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



043	MUST support integration with the institutions Link resolvers.	YES/NO	M
044	MUST have the capability to query and import bibliographic data from the library catalogue (Alma) and/or the discovery tool (Primo).	YES/NO	M
045	The system SHOULD have the capability to import/harvest bibliographic data from external sources, e.g. Institutional repositories and databases. DESCRIBE the import and harvesting possibilities.	0.5	E
046	The system SHOULD provide tools to enable easy harvesting of individual citations from other sources by the end user (like websites, applications etc.)	YES/NO	D

10 User accounts and user management

The institutions maintain their user database within the library system. It would be preferable if the reading list system could use this database directly instead of maintaining a separate user registry within the reading list system. The user database consists of one account for each user, containing necessary properties and data related to the user. These accounts should be used for authentication and authorization. The user can be a librarian, staff user and/or a patron. It should be possible to grant each user different roles and permissions within the reading list system.

No.	Requirement	Max. length (pages)	Type (M/D/E)
047	The system SHOULD use the user registry in the library system (Alma).	YES/NO	D
048	If the reading list system requires a separate user registry, it MUST be able to import, update and delete users from external systems, by job and/or in bulk by file. DESCRIBE.	0.5	M*
049	If the reading list system requires a separate user registry, it MUST be possible to register, edit and delete users manually by the institutions and Sikt.	YES/NO	M
050	If the reading list system requires a separate user registry, it MUST be able to divide patrons into different user groups, with different privileges.	YES/NO	M
051	If the reading list system requires a separate user registry, it MUST be possible to prevent fields from being overwritten by the automatic user data update jobs.	YES/NO	M
052	If the reading list system requires a separate user registry, it MUST be easy to delete users singular and in bulk, by customizable parameters. DESCRIBE.	0.5	M*
053	If the reading list system requires a separate user registry, the system MUST NOT share user data and link accounts between institutions.	YES/NO	M
054	If the reading list system requires a separate user registry, the solution SHOULD support automatic deactivation and/or deletion of users based on set criteria (e.g. inactivity for a certain period).	YES/NO	D



11 Authentication

The reading list system should offer both internal and external authentication.

For external authentication, the institutions in the Norwegian HE sector utilize a common standard for authentication through the identity federation Feide. The supplier must support Feide authentication through OIDC or SAML 2.0. Note that the Feide identity federation's architecture is different from most HE federation with a single IdP for all institutions.

No.	Requirement	Max. length (pages)	Type (M/D/E)
055	MUST have the capability to log in for students and staff.	YES/NO	M
056	The solution MUST support Feide authentication through OIDC or SAML 2: * FEIDE: https://docs.feide.no/service_providers/index.html * OIDC: https://docs.feide.no/reference/oauth_oidc/index.html * SAML: https://docs.feide.no/reference/saml/index.html	YES/NO	M
057	The solution offered MUST support Azure authentication.	YES/NO	M
058	The offered solution MUST support elevated security with MFA for end users through Feide (https://docs.feide.no/service_providers/mfa/index.html)	YES/NO	M
059	SHOULD support Single Sign On (SSO) and Single Logout (SLO) functionality.	YES/NO	D
060	DESCRIBE how the offered solution supports Feide login hints to simplify user login (OIDC: https://docs.feide.no/reference/oauth_oidc/openid_connect_details.html#login-hints-bypassing-the-login-discovery-page SAML: https://docs.feide.no/reference/saml/selectorg.html)	0.5	E
061	DESCRIBE which other authentication standards (OIDC, SAML, LDAP, CAS etc) and solutions (Azure, EntraID, Google Cloud Identity, Okta, Social logins etc) are supported in the offered solution.	0.5	E
062	SHOULD also support authentication that accommodates institutions that do not use a remote authentication method like SAML SSO. DESCRIBE the offered authentication solution.	0.5	E
063	DESCRIBE the offered step up/MFA authentication for end users when using other authentication solutions or for those without MFA in Feide.	0.25	E
064	DESCRIBE how the offered solution helps the end users select their correct authentication method when multiple authentication sources are used.	0.25	E
065	DESCRIBE how the system supports elevated security requirements, including the use of step-up authentication or MFA for specific users, roles or privileged operations.	0.25	E
066	MUST have multiple access levels and user privileges (administrator, academic, librarian, list creators etc.). Please DESCRIBE how this is handled in the system.	0.5	M*
067	SHOULD support the option to create locally defined roles and privileges as long as they do not override or violate the centrally defined role and privilege schema.	YES/NO	D



068	SHOULD support granular privilege management at the individual user level. The system should allow administrators to activate or deactivate individual privileges linked to a role on a per-user basis, without affecting other users who hold the same role.	YES/NO	D
069	Admins MUST have the option to change roles and authorizations of all other user categories.	YES/NO	M

12 API-authentication

Access to APIs must be secure in order to prevent misuse and unauthorized access to the system. The API's must be scoped and follow the principle of "data minimization" meaning that the access to the API's only give access to data and endpoints that are directly relevant and necessary to accomplish a specified purpose.

No.	Requirement	Max. length (pages)	Type (M/D/E)
070	DESCRIBE if and how the service supports authentication and authorization of APIs through Feide with OAuth2.x and JWT tokens, both as a data provider and data consumer (https://docs.feide.no/data_sharing/index.html)	0.5	E
071	The API MUST support mechanisms to restrict and control access, such as scoped access tokens, endpoint restrictions, or other mechanisms supporting the principle of least privilege. DESCRIBE how access to APIs can be limited or controlled (e.g. scopes, token restrictions, IP filtering or similar mechanisms).	0.5	M*
072	DESCRIBE the security features in the API-suite, including authentication, authorization, encryption, logging and monitoring capabilities.	0.5	E

13 Automation and AI

Sikt recognizes the potential of automation and AI to streamline workflows, enhance efficiency and improve overall user experience for librarians, students, faculty users and administrative personnel. We also see the potential in leveraging data for analytics. It is important, however, to carefully consider the ethical implications of these technologies and that any implementation in the solution is transparent and responsibly done. It is crucial to Sikt that the supplier is attuned to both current and future regulatory requirements, such as the EU AI Act. Additionally, we believe in giving our customers control over the technologies they use, including the ability to suppress or disable AI functionality if desired.

The supplier cannot use any data stored within the system or data based on the usage of the system to train global AI-models without the consent from Sikt and the consortium.

There is an expectation that the system will evolve and come to include new functions that leverage machine learning, automation and artificial intelligence that support users and help streamline

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)

workflows. It is expected that future AI functionality will be included in the software licenses and not sold as separate modules or services.

This chapter covers requirements related to AI and automation on a general system level. Requirements within a specific domain/part of the system will be covered in subsequent chapters.

No.	Requirement	Max. length (pages)	Type (M/D/E)
073	The use of AI in the systems MUST be in compliance with the EU AI Act and future legislation/regulation of AI.	YES/NO	M
074	DESCRIBE how you will ensure that the solution meets the requirements of the EU AI Act and future legislations/regulations.	1	E
075	DESCRIBE how you will ensure that the use of AI/automation is ethical and transparent.	0.5	E
076	Any new/existing AI functionality developed that is a natural extension or addition to the Reading List system MUST be an integrated part of the system and included in the deliveries.	YES/NO	M
077	DESCRIBE how data within the solution is accessible for use with data analytics or other computing tools.	0.5	E
078	DESCRIBE how the use of existing AI/automation functionality in the solution improves the efficiency of workflows for students, academic staff, librarians and administrative personnel.	1	E
079	DESCRIBE the supplier's strategic objectives, future plans and the roadmap for the development and implementation of AI and automation within the solution.	1	E
080	The system SHOULD offer solutions for low-code/no-code integrated within the system. Please DESCRIBE.	0.5	E
081	The system SHOULD support automatic matching of AI-generated citations against records in the library catalogue and display available holdings.	YES/NO	D
082	DESCRIBE how AI functionality is tested and validated before being implemented in a live environment.	0.25	E
083	The institutions MUST be able to customize, including suppress and/or disable, any AI functionality in the solution. DESCRIBE.	0.25	M*
084	The supplier MUST not use any data stored within the system or data based on the usage of the system to train AI-models without the consent from Sikt.	YES/NO	M
085	AI technology, including algorithms used in the Reading List system, MUST be transparently documented, including their purpose and data sources, in order to support informed decision-making by the Customer.	YES/NO	M
086	DESCRIBE whether and how the solution provides reporting on AI decisions to users/administrators, etc.	0.5	E
087	DESCRIBE whether and how it is possible to change the language model used for generative AI, with particular emphasis on support for European and Norwegian models, in addition to international models such as GPT-3.5 and GPT-4.	0.5	E
088	Please DESCRIBE possibilities for automating list creation workflows.	0.5	E

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



089	It SHOULD be possible to automate all or parts of the workflows so that course coordinators, librarians and administrators can be as "hands-off" as possible, if desired. DESCRIBE.	0.5	E
090	Please DESCRIBE the Reading List systems future planned AI-based services for working with reading lists.	0.5	E
091	The supplier SHOULD provide a plan for how new technologies, such as AI or other technology, can be integrated and improve workflows in the system. Examples: statistics, user guides, automated workflows and processes. Please provide examples from such plans.	1	E

14 Information Security and Privacy

The EU General Data Protection Regulation (GDPR) sets forth stringent requirements for data protection and privacy. It mandates that organizations handling personal data of EU citizens uphold the fundamental rights and freedoms of individuals, particularly their right to protect their personal data.

For Sikt, it is paramount that the solution, and the supplier providing it, adhere to all aspects of the GDPR. This includes the overarching principles of data protection, the specific requirements for security in the processing of personal data, and the stipulations for using sub-processors.

Moreover, the territorial scope of data storage and processing is a significant consideration under the GDPR. It is crucial that data is stored within the European Economic Area (EEA) and in compliance with applicable Norwegian and EU legislation. If any data processing occurs outside the EEA, appropriate transfer mechanisms must be used to ensure the data's protection.

Finally, the ownership of the data remains with the institution and/or the users of the Reading List system tool, and any agreements related to data processing must align with this principle.

Understanding and ensuring GDPR compliance is not just a regulatory requirement, but also a testament to the supplier's commitment to privacy, security and the ethical handling of personal data.

Note that Sikt requires suppliers to agree to make use of the enclosed template for Data Processing Agreement (DPA). Answers submitted will be subject to changes and refining in the negotiation phase.

No.	Requirement	Max. length (pages)	Type (M/D/E)
092	The solution and the supplier MUST comply with GDPR, including the overarching principles of data protection.	YES/NO	M
093	The solutions and the supplier MUST comply with requirements for security in the processing of personal data according to GDPR article 32.	YES/NO	M

Requirement Specification: READING LIST SYSTEM (SIKT 26/00005)



094	The supplier MUST only use sub-processors who implement appropriate technical and organizational measures that ensure that the processing meets the requirements of GDPR and has entered into a written agreement with sub-processors that impose similar obligations with regard to the protection of personal data as those imposed on the supplier itself.	YES/NO	M
095	Data MUST only be stored in EEA countries, and at all times be in accordance with applicable Norwegian and EU legislation.	YES/NO	M
096	If personal data is to be processed outside the EEA, the supplier and/or its sub-processors MUST use a valid transfer mechanism and provide a transfer impact assessment. Please note that the possibility of remote access to personal data, for instance for maintenance or support activities, will be considered a transfer according to GDPR.	YES/NO	M
097	All data stored, processed and transferred by the solution MUST remain the legal property of the institutions and the supplier shall not assert any rights over any data uploaded to the service.	YES/NO	M
098	The supplier MUST be willing to use the enclosed Data Processing Agreement (DPA).	YES/NO	M
099	The supplier MUST fill complete a draft of the DPA appendices and submit the document with bid submission.	Separate document	M*
100	DESCRIBE how an institution may suppress or disable any functionality if necessary to comply with GDPR or Norwegian law.	0.5	E
101	DESCRIBE the process through which the institutions can facilitate data subjects' rights, notably correction, deletion, and retrieval of their data.	0.5	E
102	DESCRIBE how requirements for data protection by design and by default (GDPR article 25) are met in the offered solutions.	0.5	E

15 System security and encryption

The protection of sensitive data, both in transit and at rest, is important to us and we are therefore particularly interested in understanding the data encryption standards employed across your solution.

We also seek insight into the security mechanisms of your offered solution, including its resilience against common attack vectors such as Denial-of-Service (DoS) attacks. It is crucial to understand how these mechanisms safeguard against unauthorized access at application level and lower.

Furthermore, we require information on how logging is managed within your solution, including storage and exportation of user activity logs. Finally, we are interested in how communication within the solution offered is secured through encryption and other measures.

No.	Requirement	Max. length (pages)	Type (M/D/E)
103	Data MUST be encrypted in transit and at rest. DESCRIBE the data encryption standards used across the solution.	0.5	M*

Requirement Specification: READING LIST SYSTEM (SIKT 26/00005)



104	DESCRIBE the security mechanisms in the offered solution and how these protect against (D)DoS attacks, SQL injection, cross-site scripting and other common attack vectors. Describe which mechanisms, if any, are in place to prevent access to information in the event of unauthorized access to your solution. This includes security breaches at application level and lower.	0.5	E
105	DESCRIBE which industry standards and certifications that ensure security and data protection the supplier and data centers adhere to. Attached relevant certifications can substitute a written response.	0.5 + separate document	E
106	DESCRIBE how logging is handled in the offered solution; where and for how long logs of user activity are stored.	0.5	E
107	DESCRIBE how to export logs from your offered solution to an institution's logging service and specify any delays in the availability of logs.	0.5	E
108	DESCRIBE the backup routines for the systems and the recovery plan in case of a security breach or disaster event.	0.5	E

16 Accessibility

Accessibility is a key aspect of any solution, as it ensures that all librarians, staff, students and academics can access and use the service effectively, regardless of their abilities or disabilities. Accessibility also contributes to the quality, usability, and inclusiveness of the service, as well as compliance with legal and ethical standards.

Norwegian legislation mandates that all publicly available data systems are in compliance with the current WCAG-standard at level AA.

The accessibility requirements define the minimum level of accessibility that the solution must meet, as well as the documentation and support the Supplier must provide to demonstrate and maintain compliance. The requirements are based on the European standard EN 301 549, which incorporates the Web Content Accessibility Guidelines (WCAG) 2.1. In addition, the Supplier is expected to support WCAG 2.2, and any future versions of WCAG, at a minimum of level AA. The requirements also address aspects of accessibility beyond the technical standards, including user testing, the use of assistive technologies, and accessibility considerations in relevant workflows.

Importantly, accessibility is not a one-time effort, but an ongoing commitment. It requires regular monitoring and testing to identify and rectify any accessibility issues, and a proactive approach to maintaining compliance with evolving accessibility standards.

No.	Requirement	Max. length (pages)	Type (M/D/E)
109	The supplier MUST describe their approach to accessibility, focusing on the inclusion of users with disabilities and use of assistive technologies.	1	M*

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



110	The current and future versions of the offered solution MUST comply with applicable chapters of the WAD (Web Accessibility Directive) standard EN 301 549, and the supplier MUST commit to maintaining compliance for any future versions of WAD and EN 301 549.	YES/NO	M
111	The system MUST comply with level AA in the WCAG 2.2 standard, and the supplier MUST commit to maintaining compliance with any future versions of WCAG at minimum level AA.	YES/NO	M
112	If there are WCAG requirements that are intentionally not met, this MUST be described and explained.	0.5	M*
113	An up-to-date Voluntary Product Accessibility Template (VPAT) MUST be publicly available throughout the lifetime of the contract.	YES/NO	M
114	The Voluntary Product Accessibility Template (VPAT) MUST, at a minimum, be reviewed and updated at least every 18 months.	YES/NO	M
115	The Voluntary Product Accessibility Template (VPAT) SHOULD, at a minimum, be reviewed and updated at least every 12 months.	YES/NO	D
116	DESCRIBE how accessibility issues, reported or self-discovered, are tested, prioritized, and rectified.	0.25	E
117	DESCRIBE the target timeline or plan for fixing accessibility issues when they are discovered.	0.25	E
118	The supplier MUST commit to covering any daily fines imposed by the authorities on the institutions, because of the solution being non-compliant with accessibility requirements. Fines can be imposed if breaches are not rectified within a deadline set by the authorities.	YES/NO	M

17 Usability

As part of a large knowledge sector with rapid changes in demand, technology and workflows, the usability of the reading list system is one of the pivotal factors driving cost-effectiveness, student success, and overall satisfaction.

We seek to understand how the solution ensures an intuitive, smooth and efficient user experience, from simple navigation to streamlined workflows. This includes, but is not limited to, easy access to resources, effective day-to-day operations and intuitive interfaces that cater to a diverse range of user needs.

Our focus is to assess how well the reading list system can provide a seamless and engaging user experience, decrease barriers to information, and ultimately enhance the effectiveness of the library workflows.

Your response should detail the design principles that underpin the system's usability, give examples of how those principles are executed, and indicate how user feedback is incorporated into ongoing usability enhancements.



No.	Requirement	Max. length (pages)	Type (M/D/E)
119	DESCRIBE your approach to ensuring good usability within your solution. This should include, but is not limited to, the following points: - Your process for incorporating usability considerations during the development and maintenance of the solution - How you gather and incorporate user feedback into the solution - Any usability testing or user experience research conducted during the development process - Any certifications or awards received in relation to usability or user experience.	1	E
120	DESCRIBE the user interface, emphasizing the underlying philosophy that guides design choices. Include insights into how design decisions align with the overall goals and functionality of the Reading List system.	1	E
121	DESCRIBE the main components the supplier is focusing on for delivering benefits in the future, particularly with regards to better user experience and more efficient workflows.	0.5	E
122	The solution MUST support Unicode UTF-8, and include full language support for English, Norwegian Bokmål, Norwegian Nynorsk and Northern Sami for all patron-facing elements (interface, labels, letters etc.) in the Reading List system.	YES/NO	M
123	The solutions SHOULD include translations for English, Norwegian Bokmål, Norwegian Nynorsk and Northern Sami for all user-facing elements in the Reading List system OOTB.	YES/NO	D
124	The solutions MUST allow translation of all user-facing elements in the Reading List system if the Norwegian and Sami languages are not supported OOTB.	YES/NO	M
125	DESCRIBE the processes, tools and procedures in place to facilitate and ensure high-quality translation of the solutions.	0.25	E

18 Statistics and reports

The institutions in the consortium need statistics to analyze and evaluate the service they provide to their users. Information about the courses, reading lists, citations and the usage of the system, is necessary to perform adjustments and refining the services to the users. The reading list system must offer flexible functions for statistics and allow reports on “everything”. The institutions should be able to generate the statistics themselves, both instantly and on schedule.

In addition to the single institution statistics, it is important for Sikt to be able to create statistics for the entire consortium. Furthermore, access to complex statistics and reports with data from all scopes in the reading list system will allow us to effectively work with the system, both in each institution and across the consortium.



No.	Requirement	Max. length (pages)	Type (M/D/E)
126	The solution MUST offer flexible functions for statistics and reports for each institution and the entire consortium. Please DESCRIBE the range of possibilities and formats for generating statistics and reports from the Reading List system.	1	M*
127	The supplier MUST provide a list of the data it is possible to use as the basis for reports and statistics.	1	M*
128	SHOULD support indexing and reporting on every aspect of the courses, reading lists and citations, and provide statistics on all data and operations within the system (e.g. but not limited to usage, number of reading lists, citations and reading list views etc.)	YES/NO	D
129	The supplier SHOULD create new indexes on request from the customer if there are fields missing/not indexed.	YES/NO	D
130	SHOULD be able to deliver the statistics through a service (or an API) as well as through a user interface.	YES/NO	D
131	SHOULD be able to deliver the statistics at any given time for any given time period, based on user input.	YES/NO	D
132	MUST be possible to generate aggregated statistics for the consortium.	YES/NO	M
133	SHOULD have subscription options for reports and lists, i.e. getting reports and lists regularly by scheduling.	YES/NO	D
134	MUST have several output formats for statistics (e.g. XML, txt, xls, pdf). Please provide a list of possible output formats.	0.25	M*
135	SHOULD be able to connect the analytics module with business intelligence tools like Tableau, Power BI or similar.	YES/NO	D
136	SHOULD provide information about the known limitations of the analytics module, if there are any, e.g. limit for data export, missing identifiers etc.	1	E
137	SHOULD offer mapping of new statistical data areas in response to emerging needs of the institution, be adaptable and consistently evolving.	YES/NO	D
138	MUST provide a development plan for the statistics and reports solution.	0.5	M*

19 Functional requirements

It is essential that the reading list system facilitates rational processes and provides standard functionality needed by a modern teaching institution. The system should be flexible and support various customized workflows.

The solution must support end-to-end lifecycle management of reading lists. We expect the supplier to describe how the solution ensures traceability of changes and role-based workflows. Maintaining the quality of a reading list should be possible even after publication and throughout the semester the syllabus is in use.



19.1 General functionality

No.	Requirement	Max. length (pages)	Type (M/D/E)
139	MUST contain standard functionality related to reading lists needed by a modern academic institution.	YES/NO	M
140	The supplier MUST document if there is any missing functionality that is normally considered to be part of a standard/traditional Reading List system.	1	M*
141	Appendix D describes various user stories related to the Reading List system. The supplier MUST DESCRIBE if there are any user stories listed that the systems <i>cannot</i> fulfill.	1	M*
142	SHOULD have a complete and optimal workflow in the system interface for both librarians and instructors. DESCRIBE.	1	E
143	The system MUST have a change log. It should be easy to see which citations have been added, deleted and/or modified when lists are updated. DESCRIBE.	0.5	M*
144	It SHOULD be possible to define the default view in the GUI (e.g. only show lists associated with active courses, or lists that are being prepared). See user story U02. DESCRIBE.	0.25	E
145	It SHOULD be possible to display all published lists (both active and inactive lists) on external websites. See user story U16 and U19.	YES/NO	D
146	The library and instructors SHOULD be able to switch between different views of the interface, if the interface differs for the various user groups (student/teacher/course coordinator/librarian) of the system.	YES/NO	D
147	It SHOULD be possible to trigger a purchase request from the reading list system. DESCRIBE.	0.25	E
148	Based on a set of predefined criteria, purchase requests SHOULD be triggered automatically. DESCRIBE.	0.25	E
149	MUST have the possibility to restrict viewing of list, list items, files and course materials for certain users or user groups (course students, all students at the institution, anyone etc.). DESCRIBE options.	0.5	M*
150	SHOULD have automatic notification of broken links. DESCRIBE how the system handles broken links.	0.25	E
151	Lists and list items MUST have permalinks and sharing functionality.	YES/NO	M
152	Lists and list items SHOULD have configurable tagging functionality, with both public and internal tags. See user story U30. DESCRIBE.	0.5	E
304*	MUST have an integrated viewer for displaying files and course materials directly within the system, without requiring external applications, supporting the following file formats: PDF, images (JPEG, PNG, GIF, SVG and WebP), EPUB and HTML. Please DESCRIBE.	0.25	M*
305*	For unsupported formats, the system SHOULD display a descriptive error message and where possible offer a download option. DESCRIBE how unsupported formats are handled and any limitations.	0.25	E

**Requirements 304 and 305 were added at a later stage. They are placed in this chapter for thematic coherence, as they belong here by subject matter rather than at the end of the requirement specification.*



19.2 List creation and management

To ensure efficient and flexible management of reading lists and citations, the system must provide a user-friendly and streamlined workflow that covers the entire lifecycle of a reading list – from creation and editing to publishing, maintenance and archiving.

The system must support both manual and automated citation management, allow external resources and digitized materials to be added to the lists and offer a way to display and select between alternative editions and formats. To maintain control and consistency, the system should include functionality to lock lists, courses and individual bibliographic fields, preventing unwanted or unintended changes. Additionally, the solution must facilitate effective collaboration between multiple users working on the same list, including support for real-time updates and clear status information.

No.	Requirement	Max. length (pages)	Type (M/D/E)
153	Creating reading lists and citations MUST be simple, efficient and flexible. DESCRIBE.	0.5	M*
154	It MUST be possible to create citations manually.	YES/NO	M
155	It SHOULD be possible to add citations to the reading list without having to fill in bibliographic information manually, e.g. by searching the library catalogue or discovery system – and importing the citation. DESCRIBE.	0.5	E
156	It SHOULD be possible to automatically populate fields in citations when adding unique identifiers (e.g. ISBN, ISSN or DOI). DESCRIBE.	0.5	E
157	The system SHOULD detect and handle mismatch between citation information and library holdings. DESCRIBE how.	0.25	E
158	MUST have the capability to create, publish, edit, duplicate, delete and archive lists. DESCRIBE each step.	1	M*
159	The system SHOULD show the list creator that a title exists in multiple editions and formats (new editions/e-version). DESCRIBE.	0.5	E
160	It SHOULD be possible for list creator to manually choose to display alternative editions when desired. This is important, for example, for works of fiction. DESCRIBE.	0.5	E
161	When multiple editions of a work are available, the system MUST display the most recent edition as the default record in search results. Additional editions may be accessible via an "additional versions" option but MUST be listed in descending chronological order (newest first).	YES/NO	M
162	MUST be possible to manually include/link to external resources and digitized content. DESCRIBE.	0.25	M*
163	The library SHOULD easily be able to get an overview over which titles are on one or several reading lists, and if they're already a part of the library's collections. DESCRIBE.	0.25	E

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



164	The reading list MUST display additional information for librarians and instructors: Status and list visibility, estimated number of students and actions to be taken (steps in workflow).	YES/NO	M
165	Reading lists and citations MUST have statuses that indicate where they are in the workflow and reflect what actions have to be taken.	YES/NO	M
166	MUST be possible to lock reading lists from editing, individually and in bulk.	YES/NO	M
167	SHOULD be possible to lock courses from editing and associating lists, individually and in bulk.	YES/NO	D
168	SHOULD have the ability by configuration to lock bibliographic fields in citations – to prevent instructors from editing imported information. DESCRIBE.	0.5	E
169	It MUST be possible to link one reading list to multiple courses, and multiple reading lists to one course.	YES/NO	M
170	It MUST be possible for several people to have editing privilege for the same list.	YES/NO	M
171	It SHOULD be possible to assign a list to one or several librarians for processing, manually or automatically based on certain criteria. DESCRIBE.	0.25	E
172	It MUST be possible to add public and internal (in-house) notes to lists and list items. DESCRIBE options.	0.25	M*
173	The system MUST have global settings and configuration capabilities to indicate reading list item prioritization (essential, recommended, background). DESCRIBE.	0.5	M*

19.3 Rollover

This chapter describes the functional requirements for the reuse and transfer of courses and reading lists between years and semesters. The rollover process must make it easy for institutions to copy previous lists, either individually or in bulk, and link them to new courses.

Institutions must have full control over which elements are carried over to new courses and lists, including instructors, list owners, tags, notes, copyright information, enrollment numbers, files and other relevant data. It must also be possible to add prefixes or suffixes to titles to distinguish new lists from previous versions.

The aim is to ensure an efficient and consistent rollover process that supports institutions' needs for handling large data volumes and the annual updating of course portfolios.

No.	Requirement	Max. length (pages)	Type (M/D/E)
174	For courses that were running in previous years or semesters, it MUST be possible for Sikt and the institutions to duplicate previous lists and associate these to the new courses (rollover). This must be done both manually and automatically, for individual lists and in bulk. DESCRIBE.	0.25	M*
175	Both creation of courses and list rollover MUST happen in the same job.	YES/NO	M

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



176	Each institution MUST be able to decide what elements from previous years/semesters courses/lists is to be copied and added to the new courses/lists. These elements include (but are not limited to) course instructors and/or list owners, tags, list description, public and private notes, copyrights, number of participants, list assignees and files. DESCRIBE.	0.5	M*
177	There MUST be an easy way for institutions to add a prefix or suffix of their choice in the title of newly rolled over lists.	YES/NO	M

19.4 Digitization and copyright

The system should support and manage digitized course materials within reading lists. It is essential that the reading list system handles different aspects of digitization and copyright, including the BOLD integration.

When the reading list system is integrated with Bolk, copyright clearance can be managed as part of the reading list workflow. Without this integration, institutions would be required to manage copyright clearance separately, creating additional administrative burden. The technical specifications for the Bolk system and API's are described in Appendix C.

Instructors should have the option to request copyright clearance through the system, allowing the library to handle the process as described in the corresponding user stories. In addition, the system must allow instructors to manually upload files to individual citations. When doing so, instructors should be prompted to indicate the applicable copyright status to ensure proper rights management.

No.	Requirement	Max. length (pages)	Type (M/D/E)
178	Instructors SHOULD be able to place a digitization request that is then handled by the library within the system. DESCRIBE options. See user story U10 and U11 in Appendix D.	0.5	E
179	MUST have the option to manually upload files to reading list citations.	YES/NO	M
180	The system SHOULD prompt instructors to select the applicable copyright status when manually uploading files to reading lists.	YES/NO	D
181	Uploaded files not marked as copyright cleared or as fair use SHOULD NOT be visible to students until clearance has been confirmed.	YES/NO	D
182	Instructors SHOULD be able to order copyright clearance. See user story U14 and U15 in Appendix D. DESCRIBE.	0.5	E
183	It MUST be possible to create a Bolk request directly from a citation, and for the citation's metadata to be sent to Bolk.	YES/NO	M
184	It SHOULD be possible to create multiple Bolk requests with multiple page ranges from the same citation.	YES/NO	D
185	Requests in the Bolk-integration trigger different statuses from Bolk, depending on what percentage of the book the chosen page range represents. These statuses MUST be automatically reflected in the reading list system, in a way that is obvious to the user, especially if further action is needed. See user story U08 and U12 in Appendix D + Appendix C. DESCRIBE.	0.5	M*

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



186	Users MUST be informed once the status changes from “Waiting for approval” to “Approved” or “Declined”, without the library needing to be involved.	YES/NO	M
187	Files from Bolk, when available, MUST appear on the corresponding citations in the reading lists.	YES/NO	M
188	Course materials that include files from Bolk MUST be visible only to students who are enrolled in the course.	YES/NO	M
189	Citations with multiple page ranges MUST either display multiple files or a single file containing the different excerpts.	YES/NO	M
190	The Bolk integration MUST require a specific role in order to be visible in the interface.	YES/NO	M

19.5 Resource availability

The system must display availability and access to resources in the library. The solution must provide real-time information on physical and digital materials, with a clear distinction between different formats and versions of the same resource.

The system must display correct holdings data and give end users an overview of all available formats. Furthermore, there must be seamless links to full-text resources, either directly or via the institution's link resolver.

No.	Requirement	Max. length (pages)	Type (M/D/E)
191	MUST have real time item availability look-up in library catalogue. Students must be able to see if physical items are available for loan and reading list creators must be able to see what is available in the library holdings.	YES/NO	M
192	For analytic records (e.g. book chapters), the system MUST display holdings only for the host item in which the analytic is contained.	YES/NO	M
193	Holdings from related but independent bibliographic records (e.g. workbooks or companion publications) MUST NOT be displayed automatically.	YES/NO	M
194	The system SHOULD clearly display where and how the material is available and can be accessed.	YES/NO	D
195	The system MUST display a clear distinction between different formats and types of resources in the reading list (e.g. e-book, print book, chapter, article etc.).	YES/NO	M
196	SHOULD be able to display multiple formats for the same citation (e-book/printed book). The end user should see all available formats of the resource.	YES/NO	D
197	SHOULD display available loan types/loan conditions (short-term loan etc.) and license types for e-resources (unlimited/single user/multi-user).	YES/NO	D
198	MUST have seamless links from the reading list or link via link resolver to full-text electronic and digital resources.	YES/NO	M



19.6 Central management and group functionality

The consortium wishes to benefit from shared configuration and make central and local administration more efficient. Such configuration should be maintained by Sikt and distributed to the consortium, either to all, individually or to a group of institutions. The institutions must be able to override these configurations when needed. The objective of group functionality is to simplify operations for the group members by allowing operations to be done once, taking effect for all members.

The system must at the same time enable separate customizations per institution, allowing each institution to make its own changes at its level without affecting others. Institutions must be able to customize their user interface and edit terminology, menus and languages.

No.	Requirement	Max. length (pages)	Type (M/D/E)
199	Sikt MUST be able to act as a system integrator on behalf of the consortium and have the ability to customize the solution according to the consortium needs. DESCRIBE how this is achieved.	0.5	M*
200	Configuration of the system MUST be possible for both Sikt and the institutions. DESCRIBE what can be configured and how configuration works at different levels in the system and across the consortium.	1	M*
201	Sikt MUST be able to customize the system on behalf of the consortium by setting default values for all institutions in one operation.	YES/NO	M
202	Sikt MUST have the possibility to customize the system for each institution separately.	YES/NO	M
203	Each institution MUST be able to customize the system at their own institutional level.	YES/NO	M
204	Sikt and the institutions MUST have the possibility to customize text and menus in the GUI.	YES/NO	M
205	DESCRIBE the possibilities for local customization of the user interface, e.g. branding, links, text, logo etc.	0.5	E
206	Sikt and the institutions SHOULD have the possibility to customize (hide, activate/deactivate) elements in the GUI. DESCRIBE the possibilities.	0.5	E

19.7 User interface

We are looking for a solution that offers an intuitive, accessible and fully responsive reading list experience for students, instructors and librarians. Users should be able to interact with reading lists in flexible ways and navigate content with ease. The interface must be clean, self-explanatory and configurable, while also supporting user-level preferences such as language settings.

Core functionality must enable efficient co-working, clear visibility of list metadata and a consistent experience across different devices. All functionalities should be easy to understand, responsive and designed to support a wide range of academic user needs.



No.	Requirement	Max. length (pages)	Type (M/D/E)
207	Users MUST be able to download/save/print reading lists and reading list items.	YES/NO	M
208	SHOULD be able to present the reading list on screen in the most common reference styles, including IEEE, Harvard, APA and Vancouver. DESCRIBE.	0.5	E
209	Users SHOULD have the capability to annotate lists and list items when applicable. DESCRIBE options.	0.5	E
210	The system SHOULD have a "My reading lists" functionality for all users of the system – including students, instructors, and librarians – that provides a complete overview. DESCRIBE.	0.5	E
211	MUST have a user-friendly interface that is logically structured. Users should know intuitively how to use it, without needing training. DESCRIBE.	0.5	M*
212	It MUST be obvious which elements in the GUI are clickable.	YES/NO	M
213	Viewing and editing lists and list items SHOULD take place in the same area of the interface – you shouldn't have to look in one place and edit in another (front-end editing). See user story U01 in Appendix D.	0.25	E
214	All text elements in the interface SHOULD be copyable.	YES/NO	D
215	The full title of the reading list SHOULD be visible when you access the list.	YES/NO	D
216	The date when the list was published and last updated SHOULD be visible.	YES/NO	D
217	It SHOULD be possible for institutions to configure the menus and workflows in the Reading List user interface. DESCRIBE.	0.25	E
218	The institution MUST be able to set a default language for the interface.	YES/NO	M
219	The user MUST be able to choose a preferred language and save the setting as default.	YES/NO	M
220	MUST have integrated help functionality, with context-sensitive help. Please DESCRIBE any context-sensitive help offered within the solution.	0.25	M*
221	Error messages SHOULD be informative and actionable. DESCRIBE how.	0.5	E
222	It SHOULD be easy to correct and undo errors and user mistakes in the Reading List system, e.g. deletions of lists, citations etc. DESCRIBE how.	0.5	E
223	It SHOULD be possible for several users to work on the same list at the same time (co-working). DESCRIBE.	0.5	E
224	SHOULD have the capability to both search and browse/navigate for reading lists. DESCRIBE.	0.5	E
225	The system MUST support case-insensitive searching via a single search box and additional advanced search functionality with options to search/filter (e.g. by lecturer, title, code, campus, institute, etc.). DESCRIBE possibilities.	0.5	M*



226	The system SHOULD provide both exact/precise and “forgiving” search functionality that handles special characters and accounts for user errors (e.g. typos). DESCRIBE.	0.5	E
227	MUST be based on responsive design and support mobile and tablet devices. Please DESCRIBE how and to what extent tablets and handheld devices are supported by the system.	0.5	M*
228	The student view on mobile devices SHOULD provide full functionality, adapted for mobile use.	YES/NO	D
229	Published reading lists MUST minimum display: full title, year created, last updated, semester, course code and year of course.	YES/NO	M
230	Which information displayed in a citation SHOULD be configurable. Institutions should be able to decide what is visible in the different views. DESCRIBE.	0.5	E
231	MUST have the possibility to restrict access to digital and electronic content for end users. DESCRIBE options.	0.25	M*

19.8 Communication

The system should enable communication between users in a simple and accessible manner. It must support various types of notifications, messages and alerts, while allowing customization of which events trigger communication and who receives it. With diverse user groups, notifications must be intuitive, relevant and adaptable. For example, students should be informed when significant changes are made to a published list.

To avoid overwhelming users with notifications, the system must provide configurable settings for managing communication. Communication should always be clear, purposeful and offer actionable guidance.

No.	Requirement	Max. length (pages)	Type (M/D/E)
232	The system SHOULD have functionality for collaboration, communication, notifications and alerts. DESCRIBE the solutions – and how these can be customized. See user story U04 in Appendix D.	0.5	E
233	It SHOULD be configurable which events trigger notifications and alerts, and which user groups or roles receive them. DESCRIBE. See user story U06 in Appendix D.	0.5	E
234	There SHOULD be configurable options for system messages and notifications when a list is created, and when something is edited in the citations or reading list. DESCRIBE. See user story U06 and U07 in Appendix D.	0.5	E
235	It SHOULD be possible to manually trigger a push notification to students when changes are made to a published list, instead of notifications always being sent automatically for every change made in the lists/citations. DESCRIBE. See user story U07 in Appendix D.	0.5	E
236	SHOULD have the capability for communication between academic staff and library. Please DESCRIBE. See user story U04 and U05 in Appendix D.	0.5	E



237	Messages and communication between academic staff and library in the system MUST be intuitive and easily accessible for both parties. DESCRIBE.	0.5	M*
238	Communication between academic staff and library MUST be configurable, with options to enable or disable. DESCRIBE.	0.5	M*
239	It SHOULD be possible to publish global system messages to end users when needed.	YES/NO	D
240	It MUST be possible for end users to report broken links and errors in lists and citations.	YES/NO	D
241	Institutions MUST have the option to send a notification to instructors/list owners when a list has been rolled over.	YES/NO	M

19.9 Alphabetizing/sorting

The solution must provide flexible and intuitive tools for organizing, structuring and managing reading lists. List creators should have full control over how content is arranged, with options for sorting, filtering and reordering items to support different workflows. The system must also enable efficient movement and reuse of citations and sections both within and across reading lists.

No.	Requirement	Max. length (pages)	Type (M/D/E)
242	The list creator MUST be able to organize the list according to their own choice. DESCRIBE the possibilities.	0.5	M*
243	List creators MUST have the capability to automatically sort reading list items alphabetically both by title and person name in a way that makes sense to the end user based on the metadata that is displayed. See user story U03.	YES/NO	M
244	Users SHOULD have the option to filter and temporarily order/reorder citations by predefined parameters. DESCRIBE.	0.5	E
245	It MUST be possible to copy/paste, move and manage citations and blocks/sections of a reading list, in and between lists. DESCRIBE.	0.5	M*

19.10 Data import and export

This section describes how instructors and librarians can import and export reading lists and citations. For bulk operations and rollover processes, see the section 4.1.1 "Rollover".

Instructors and librarians need to be able to easily reuse, share, and update reading lists across systems and courses. The solution should therefore provide intuitive and flexible import and export functionality, allowing users to transfer both complete reading lists and individual citations in commonly used formats and reference styles.

The functionality should support users in maintaining high data quality by ensuring that all relevant information—such as metadata, notes, tags, links, and holdings—is preserved during import and export.



No.	Requirement	Max. length (pages)	Type (M/D/E)
246	MUST be able to import/export lists and citations, individually and in bulk. DESCRIBE how this can be done.	0.5	M*
247	MUST have the capability to import/export reading lists and citations in the most common reference styles, including IEEE, Harvard, APA and Vancouver. DESCRIBE.	0.5	M*
248	It MUST be possible to import/export reading lists and individual citations, in various data and file formats (e.g. RIS, CSV, Word and PDF). DESCRIBE.	0.5	M*
249	It SHOULD be possible to export reading lists and citations so that all fields and information associated with the citations are included (incl. tags, notes and comments, links and holdings, etc.). DESCRIBE.	0.5	E

20 Services

A high level of service quality, transparency and close collaboration between the provider and the customer are fundamental expectations throughout the entire lifecycle of the agreement. The requirements cover all phases from initial implementation to end-of-contract provisions, ensuring that the provider delivers a reliable and well-supported service that meets the operational needs of Sikt and the consortium institutions.

20.1 Implementation and Onboarding

The successful deployment of any solution hinges on a well-planned and effectively executed implementation project. This includes aspects such as the technical setup, data migration and importantly, the onboarding of users, which should be designed to ensure a smooth transition, enabling quick familiarization with the solution and the utilization of its features to their full potential.

The following requirements specify the expectations and responsibilities of the provider in relation to the implementation and onboarding activities, as well as the information that the provider must provide to demonstrate their capacity and quality of service. The requirements cover aspects such as training, online help, technical implementation, migration, timeline and scalability.

No.	Requirement	Max. length (pages)	Type (M/D/E)
250	DESCRIBE which support and consulting services are available from the supplier. Describe capacity, competence, geographical location and language skills.	0.5	E
251	The supplier MUST propose a timeline and procedure for onboarding new institutions. Assess your capacity to implement the offered solution at multiple new institutions in parallel and DESCRIBE how this can be done.	1	M*

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



252	DESCRIBE which support is available for new institutions in the onboarding process, such as on-site and/or online training, self-paced learning resources, video and text tutorials, etc.	0.5	E
253	If applicable/relevant DESCRIBE a timeline and procedure for migrating the consortium from the current Reading List system to a new system.	1	E
254	In case of migration to a new Reading List system, the supplier MUST allow multiple test loads (minimum 4) of data (all types) into the new system.	YES/NO	M

20.2 Support

In this section, we delve into the critical aspects of Support, SLA and Contract Management. Reliable and accessible support services are vital to ensure smooth and uninterrupted operation of the solution for all users. This includes the availability of customer support in English, as well as comprehensive end-user documentation.

The SLA is a key component in defining the expectations and responsibilities between the customer and the provider. It covers all aspects of the service, from up-time and performance to issue resolution times. The reading list system is an important component in the day-to-day operations within the institutions and needs to have very high availability (including failover possibilities), especially in peak periods during the year. The proposed SLA needs to consider the institutions' need for quick response and action in case of problems with availability, problems or errors, security incidents and reporting, etc.

Contract Management, on the other hand, focuses on the administrative aspects of the service agreement, including the provider's responsibilities, regardless of any sub-contractors being used, the availability of updated technical documentation, and the provision of a single point of contact for all issues and queries.

We seek a high level of service quality and a strong, transparent relationship between the provider and the customer.

Sikt will act as the focal point for support to the consortium and will report cases, bugs and issues to the provider on behalf of the institutions.

Each institution will provide functional (1st line) support to their own users (the end users). Sikt will provide the 2nd line of support to the institutions covering both functionality and customization issues. In cases where Sikt does not have the answer, Sikt must be able to contact the supplier for advanced support (i.e. typically 3rd and 4th line of support) during working hours 08.00 – 16.00 CET (GMT + 1).

Geographical location and proximity of support and consulting services will be weighted in the assessment.



No.	Requirement	Max. length (pages)	Type (M/D/E)
255	The supplier MUST provide advanced support (typically 3rd line or 4th line of support) to Sikt during working hours 08:00–16:00 CET (GMT+1).	YES/NO	M
256	MUST have support capabilities in Europe.	YES/NO	M
257	DESCRIBE the advanced support capabilities, e.g. how this is shared between a main office and European office, how this will affect promised response times, etc.	0.5	M*
258	The supplier MUST describe how advanced support of emergency incidents is handled.	0.5	M*
259	The supplier MUST provide support for all services offered, independently of any subcontractors being used. DESCRIBE how to handle the following issues: * information to customers regarding software bugs * fault reporting * software fixing procedures.	0.5	M*
260	The supplier MUST notify Sikt when emergency incidents occur. E.g. system down, unavailability, response time issues. DESCRIBE the process and methods for communicating incidents to Sikt/institutions.	0.25	M*
261	The Provider MUST have a single point of contact (“Helpdesk”) for reporting and updates on all issues and questions that arise during the use of the services provided.	YES/NO	M
262	DESCRIBE how Sikt can report problems to support/helpdesk (e.g. phone, email, chat, online forms etc.). Please also describe how the progress of reported issues can be monitored by the Customer.	0.5	E
263	Sikt SHOULD have the opportunity to have monthly meetings with support to address, discuss and escalate important support cases within the consortium.	YES/NO	D
264	Reported bugs of middle and high priority MUST be remedied within reasonable time. DESCRIBE expected target time for resolving middle and high priority cases.	0.5	M*
265	The supplier SHOULD provide statistics on expected time for: * initial real response (not automated first response on receiving of case) * time to resolution for high, medium and low priority cases * time to production for cases that have been sent to development for fixing	0.5	E

20.3 Training and documentation

Sikt or selected institutions will be responsible for training the members of the consortium. Sikt will also provide support to the institutions within the consortium. For Sikt to do this successfully, the supplier must be responsible for the proper training of the Sikt staff (and a selected group from the consortium) and for providing relevant 3rd and 4th line of support to Sikt.

Requirement Specification: READING LIST SYSTEM (Sikt 26/00005)



The supplier must provide standard training material and train Sikt staff. Sikt will re-use the documentation and provide training for the consortium.

No.	Requirement	Max. length (pages)	Type (M/D/E)
266	The Provider MUST provide training of Sikt staff and other selected staff users from the institutions. Please describe how the training will be done (seminars, online courses, webinars, etc.)	0.25	M*
267	Sikt MUST have access to training material and be able to download/access and distribute it to the consortium during the contract period.	YES/NO	M
268	The Provider MUST provide training programs and a detailed description of the training programs.	YES/NO	M
269	The documentation MUST be available in English.	YES/NO	M
270	The documentation MUST be comprehensive, up-to-date and cover all aspects, functionality and configuration options within the Reading List system throughout the contract.	YES/NO	M

20.4 Test environment

The supplier must provide a test environment for Sikt and the consortium. The test environment would be used to test the effect of configuration changes, new functionality introduced into the system and other changes. The test environment should be a complete copy of the production environment with real data and configuration. There must however be mechanisms that ensure the anonymization of user-data, as GDPR does not allow real user data in a test environment. There should be some easy tools, mechanisms or central scheduling that allows the test environment to be refreshed with data and configuration from the production environment.

No.	Requirement	Max. length (pages)	Type (M/D/E)
271	The supplier MUST provide fully functional test environments that mirror the production environments in terms of data, configuration, and functionality.	YES/NO	M
272	MUST implement and maintain robust mechanisms within the test environment to ensure anonymization of personal user data in compliance with GDPR regulations, while retaining the integrity and usefulness of the test data.	YES/NO	M
273	Each institution SHOULD have access to their own separate testing environment or instance.	YES/NO	D
274	New or significantly altered functionality MUST be introduced to the institutions' test environment well ahead of implementation in the live production environment. DESCRIBE this process and timeline.	0.5	M*
275	SHOULD provide ability to regularly refresh the test environment with the latest data and configurations from the production environment	0.25	E



	(through easy-to-use tools, central scheduling or other mechanisms). DESCRIBE.		
276	The test environment MUST enable thorough interoperability testing between the test environments for the Reading List system and test environments for the LSP and the Discovery System, ensuring the entire workflow can be rigorously tested and validated.	YES/NO	M

20.5 Service Level Agreement (SLA)

There must be an SLA covering all aspects of the production service, which includes system availability, system response time, incident handling, service downtime and interruptions, supplier's response time and support availability and channels.

No.	Requirement	Max. length (pages)	Type (M/D/E)
277	The service MUST have a Service Level Agreement (SLA) covering all aspects of the production service, which includes system availability, incident handling, service downtime and interruptions, supplier's response time and support availability and channels. Provide and DESCRIBE the proposed SLA for the solution.	0.5 + separate document	M*
278	The supplier SHOULD provide Sikt with a report/orientation after an incident. DESCRIBE the process and to what extent the supplier will be communicating root causes and lessons learned to Sikt.	YES/NO	D

20.6 Availability and performance

It is expected that the system will have good performance and can scale according to the consortium's needs. It must be able to handle large sets of users and large amounts of courses, reading lists and citations.

The general interface must have an overall quick response time, and it must be possible to switch between different areas of the system smoothly and without long loading time. It must be possible to retrieve lists, configurations and tasks in an efficient and user-friendly manner in order to achieve efficient workflows.

Performance by response time may vary depending on which kind of operation and how often it is used. Patron-facing operations require shorter response time than staff user operations and reading list operations require shorter response time than reports. The system must however ensure a quick response time enabling staff users to carry out their daily tasks efficiently and seamlessly, without any delays due to system loading or operation execution.



No.	Requirement	Max. length (pages)	Type (M/D/E)
279	The system MUST be able to handle a large, and continuously growing, collection of courses, reading lists and citations without affecting performance.	YES/NO	M
280	There MUST be no upper limit to the number of simultaneous users.	YES/NO	M
281	The uptime requirement for the Reading List system in the SLA MUST be better than 99.5% per month, 24/7/365.	YES/NO	M
282	The uptime requirement for the Reading List system during business hours in the SLA MUST be better than 99.75% per month.	YES/NO	M
283	The uptime requirement for the Reading List system in the SLA SHOULD be better than 99.9% per month.	YES/NO	D
284	The uptime and response time for the Reading List system in the SLA SHOULD be calculated monthly.	YES/NO	D
285	The response time requirements for actions and operations within the Reading List system in the SLA MUST be that: * 50% of all online transaction types are performed in less than one (1) second (server-side response times) * 75% of all online transaction types are performed in less than two (2) seconds (server-side response times) * 95% of all online transaction types are performed in less than two and a half (2.5) seconds (server-side response times). Online transaction types are defined with examples in Appendix E.	YES/NO	M
286	The SLA SHOULD include response time requirements for APIs.	YES/NO	D
287	Scheduled downtime MUST be performed during the maintenance window.	YES/NO	M
288	The maintenance window SHOULD be between the hours of Saturday 20:00 and Sunday 06:00 Central European Time.	YES/NO	D

20.7 End-of-Contract Provisions

When the contractual relationship draws to a close, it is crucial to ensure that the transition out of the current service is as smooth and seamless as the onboarding process.

One of the key considerations during this phase is the secure and efficient export of data from the service. It is essential that the solution has standard-based mechanisms and formats to facilitate this process, ensuring that the data can be easily imported into a new service.

Moreover, it is important to understand how institutions can access their data stored in the solution after the contract has expired. This includes any potential changes to the services during the initial months following the contract's expiration.

The supplier shall provide assistance to the institutions if they wish to terminate the agreement. The supplier shall facilitate the transfer of the institution's data to the institution or to a third party designated by the institution.



No.	Requirement	Max. length (pages)	Type (M/D/E)
289	The solution MUST have a mechanism for exporting all of the customer/institutional data within the system from the service at the end of the contract.	YES/NO	M
290	DESCRIBE how the mechanism to export all of the data from the solution at the end of the contract can ensure the import of this data into a new service.	0.5	E
291	DESCRIBE whether institutions can access the data stored in the solution beyond termination of the contract and how such access is accommodated (the price per institution for this service should be specified in the price matrix).	0.5	E

20.8 Future Development / Roadmap

As technology evolves and educational needs change, it is crucial that the solution can adapt and grow to meet these changing demands.

A clear and detailed development roadmap can provide valuable insights into the provider's plans for future enhancements, features and technical improvements. This not only reflects the provider's commitment to continuous improvement but also helps customers plan their own IT strategies and resources accordingly.

Moreover, the development process itself is of interest, particularly the extent to which it is user-centered and involves input from customers/community. The ability for customers to participate in this process, perhaps through a customer advisory council, is an important consideration.

No.	Requirement	Max. length (pages)	Type (M/D/E)
292	Please share your current development roadmap that addresses features, functionalities and technical aspects pertaining to the offered solution for at least the next two years. It is adequate to provide a link to an authoritative source for the roadmap. The roadmap must include time estimates.	1	M*
293	MUST describe how the product roadmap is developed, with particular emphasis on user-centered design and customer involvement. This includes how the supplier works with customers and participating institutions to identify current and future requirements, and in what ways institutions can participate in this process. The description MUST cover concrete mechanisms and activities such as customer advisory councils, focus groups, user meetings, beta-testing programs, early adopter schemes, feedback channels, community involvement, and enhancement programs.	0.5	M*



294	DESCRIBE how you enable customer participation and community involvement across all phases of the system lifecycle — including ongoing operations, support, and future development. This includes how you actively engage with and leverage the expertise within the user community, facilitate knowledge sharing, gather and act on feedback and involve users in prioritization and decision-making processes.	0.5	E
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21 Options

The service may in the future be expanded to include a selection of closely related services. We want to know if the supplier also offers other products or services within the same service area. We are also interested in sub-functionality within the various options.

To create predictability for the option services, we primarily want the options to follow the same pricing model as the service in general. The options are priced in Tender Document 4 – *Price Matrix*. The customer has no obligation to buy the options. Some institutions may want to use the services listed as options, while other institutions may not want to use the options.

The same requirements for data security, GDPR, and usability apply to the options as to the service in general.

No.	Requirement	Max. length (pages)	Type (M/D/E)
295	Please DESCRIBE the supplier's current portfolio of other services and products relevant to the service area.	0.5	E
296	If there is any, please DESCRIBE future plans for functionality and services relevant to the solution, outside the scope of the binding roadmap described in previous requirements. Note that this answer will <i>not</i> be weighted in the assessment.	1	E
297	All options shall be individually priced in 4 - Price matrix (sheet 6_Options). If nothing else is described, the price model is Unit price per institution, with the same discount as in the service price (sheet 2_Service_price). Describe any other discounts, price models or variations of pricing for the options offered. The prices and price models will be reflected in the completed contract for the Reading List System.	Tender document 04 - Price Matrix	M*
298	It SHOULD be possible to order development of additional system functionality/integrations directly from the vendor.	YES/NO	D
299	DESCRIBE the supplier's capacity and rates for consulting work on developing custom integrations.	0.5	E



22 Price

The goal of the pricing model is to create predictability for both the customer and the supplier. The pricing model should make it easy for the consortium to get an overview of the total costs of the service.

The price model should be easy and scalable and allow predictability if an institution joins/leaves the consortium. The fact that Sikt acts as the single point of contact for the supplier in contract administration, payment and support for about 30 institutions should result in a significant discount compared to having separate contracts.

All parts of the delivery (the reading list system with requested functionality, services, etc.) that are described in the offer are considered included in the supplier's prices. If there are exceptions to this, it must be explicitly stated under each question/description.

We expect that the pricing model will evolve in the negotiation phase, based on feedback from the negotiations. It is important to get a clear picture of the costs for all parts of the delivery, including implementation, annual service fees, as well as additional costs/options. If there are elements that cannot be priced explicitly, the pricing model should indicate the concept and price basis (e.g., price per user, price for infrastructure, etc.).

The pricing model shall be based on the number of Full-Time Equivalents (FTEs) at each institution per year. One (1) FTE is defined as 60 ECTS credits produced. The Norwegian Database for Higher Education (DBH) shall be used as the source for the annual number of ECTS credits produced by each institution. There should be a lower price per FTE for institutions with a high number of FTEs compared to smaller institutions. In addition, the total price for each institution should be subject to an upper cap.

The contract for the consortium regarding the reading list system shall have a minimum duration of five (5) years. After the initial five-year period, the customer may terminate the contract by giving twelve (12) months' written notice. The supplier may terminate the contract by giving twenty-four (24) months' written notice. The contract shall specify the detailed procedures for termination.

The contract and pricing model shall allow individual institutions to join or leave the consortium during the contract period (including during the initial five-year term). In such cases, the annual consortium price shall be recalculated accordingly.

If the solution offered depend on any other systems that are subject to a separate contract, the customer shall have the right to terminate this contract if the agreement for such underlying system is terminated.

The contract fee must be in the currency Norwegian Krone (NOK).

Requirement Specification: READING LIST SYSTEM (SIKT 26/00005)

No.	Requirement	Max. length (pages)	Type (M/D/E)
300	All deliverables shall be priced in 4 - Price matrix. Unless other information is given, prices submitted in the price matrix include all functionality described in the Bidder's answers, unless clearly specified and priced as an option. Describe any other discounts, price models or variations of pricing for the offered deliverables.	Tender document 04 - Price Matrix	M*
301	The fees MUST be submitted in Norwegian Kroner (NOK).	YES/NO	M
302	The pricing model MUST be based on the number of Full-Time Equivalents (FTEs). See Appendix A - List of institutions.	YES/NO	M
303	DESCRIBE limitations – if any – on available storage to each institution or to the consortium as a whole, including storage for digital objects. If there are limitations, describe the expected growth rate of those limitations, as well as pricing for exceeding the quotas.	0.5	E



Appendices to the requirement specification

Appendix A – List of institutions

Appendix B – List of integrations

Appendix C – Bolk copyright clearance integration

Appendix D – User stories

Appendix E – Online Transaction Types Definitions

Appendix F – FS import file format

All appendices are enclosed in tender document 11: Requirement specification appendices.