भारतीय मानक

Indian Standard

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सूचना और प्रलेखन — राष्ट्रीय पुस्तकालयों के लिए गुणवत्ता आकलन

Information and Documentation — Quality Assessment for National Libraries

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NATIONAL FOREWORD

This Indian Standard which is identical to ISO 21248 : 2019 'Information and documentation — Quality assessment for national libraries' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of the Documentation and Information Sectional Committee and approval of the Management and Systems Division Council.

The text of the ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'; and

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

Annex A is integral part of this standard and Annex B and Annex C are for information only.

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Introduction

This document is concerned with the evaluation of national libraries.

It provides guidance on the use of performance indicators regarding the quality of services in national libraries and on methods for assessing the impact and value of national libraries.

Clause 5 resumes the work done in ISO/TR 28118:2009 where, for the first time, a specific evaluation method was described for national libraries. This document establishes a set of performance indicators that are adapted to the mission and functions of national libraries. Annex A specifies how the indicators are intended to be calculated and used.

In Clause 6, this document describes methods for identifying and proving the impact of national libraries on individuals, institutions and on society. The methods described in Clause 6 do not reflect all possible methods or evaluation techniques, but are those seen to be most effective for assessing impact of national libraries. Annex B gives examples of impact surveys, considering different user groups of national libraries.

The texts in this document are partly based on ISO 11620 and ISO 16439.

Indian Standard

INFORMATION AND DOCUMENTATION — QUALITY ASSESSMENT FOR NATIONAL LIBRARIES

1 Scope

This document defines terms for the quality assessment of national libraries and specifies the following methods for the assessment:

— performance measurement, and

— impact assessment.

The results of both methods are of special interest for comparison over time within the same library. Comparisons between libraries are possible if differences in the mandate, tasks and constituencies of the libraries are taken into account.

Not all methods described in this document apply to all national libraries. Limitations of the applicability of individual methods are specified in the descriptions.

This document is not intended to exclude the use of performance indicators or of methods for impact assessment not specified in it.

This document does not cover web archiving, but refers to ISO/TR 14873 for statistics and quality issues for this new task of national libraries.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
access
successful request of a library-provided online service

Note 1 to entry: An access is one cycle of user activities that typically starts when a user connects to a library-provided online service and ends by a terminating activity that is either explicit (by leaving the database through log-out or exit) or implicit (timeout due to user inactivity).

Note 2 to entry: Accesses to the *library website* (3.46) are counted as *virtual visits* (3.97).

Note 3 to entry: Requests of a general entrance or gateway page should be excluded.

Note 4 to entry: If possible, requests by search engines should be excluded.

[SOURCE: ISO 2789:2013, 2.2.1]

3.2
accessibility
ease of reaching and using a service or facility

[SOURCE: ISO 11620:2014, 2.2]

3.3
anecdotal evidence
evidence based on anecdotes or stories, obtained informally from personal observations and experiences, not collected systematically nor empirically tested

[SOURCE: ISO 16439:2014, 3.5]

3.4
availability
degree to which content, documents, facilities or services are actually provided by the library at the time required by users

[SOURCE: ISO 11620:2014, 2.6]

3.5
benefit
helpful or good effect, or something intended to help

[SOURCE: ISO 16439:2014, 3.7]

3.6
book
non-serial printed document in codex form

[SOURCE: ISO 2789:2013, 2.3.4]

3.7
capital expenditure
expenditure which results in the acquisition of, or addition to, fixed assets

Note 1 to entry: This includes expenditure on building sites, new buildings and extensions, furnishings and equipment for new and expanded buildings, computer systems (hardware and software), etc. When applicable, local and national sales/purchase taxes [e.g. value added tax (VAT)] are included.

[SOURCE: ISO 2789:2013, 2.6.1]

3.8
closed stacks
stacks that are not accessible to users

Note 1 to entry: Antonym: *open stacks* (3.63).

[SOURCE: ISO/TR 11219:2012, 2.19]

3.9
commercial publication
document in print or electronic format that is generally produced, distributed and sold for the purpose of profit

Note 1 to entry: Excludes publications by non-profit organizations.

[SOURCE: ISO 2789:2013, 2.3.7, modified — Note 1 to entry has been added.]

3.10
conservation
preservation measures and actions applied to prevent, arrest or delay deterioration of a document or other material object

[SOURCE: ISO 5127:2017, 3.12.1.01]

3.11
content unit
computer-processed uniquely identifiable textual or audio-visual piece of published work that may be original or a digest of other published work

Note 1 to entry: This includes documents or parts of documents (e.g. articles, abstracts, content tables, images) and descriptive records.

Note 2 to entry: Adapted from COUNTER code of practice, Release 3:2008.

Note 3 to entry: PDF, Postscript, HTML and other formats of the same content unit will be counted as separate items.

[SOURCE: ISO 2789:2013, 2.3.9]

3.12
contingent valuation
method for assessing the economic value of non-profit institutions and projects of public utility depending on potential users' responses to survey questions such as what they are willing to pay for a *benefit* (3.5) or feature (willingness-to-pay), or what they would accept as financial compensation if a certain benefit or feature was missing (willingness-to-accept)

Note 1 to entry: The method is used in environmental protection and health care, for example.

[SOURCE: ISO 16439:2014, 3.9]

3.13
cultural economics
branch of economics that studies the relation of culture to economic outcomes and explores cultural phenomena as economic factors

[SOURCE: ISO 16439:2014, 3.12]

3.14
data mining
computational process that identifies patterns by analysing *quantitative data* (3.73) from different perspectives and dimensions, categorizing it, and summarizing potential relationships and impacts

[SOURCE: ISO 16439:2014, 3.13]

3.15
digital document
information unit with a defined content, born digital or digitized, that has been created or digitized by the library or acquired in digital form as part of the *library collection* (3.43)

Note 1 to entry: This includes eBooks, electronic patents, networked audio-visual documents and other digital documents, e.g. reports, cartographic and music documents, preprints, etc. Databases and electronic serials are excluded.

Note 2 to entry: A digital document can be structured into one or more files.

Note 3 to entry: A digital document consists of one or more *content units* (3.11). Before *digitization* (3.16), the library must decide which content units should be searchable afterwards, e.g. articles in serials, or songs on records.

[SOURCE: ISO 2789:2013, 2.3.13]

3.16
digitization
process of converting analogue materials into digital form

Note 1 to entry: Digitization for document supply from the *library collection* (3.43)to a user or institution is excluded.

Note 2 to entry: Digitization for preservation purposes is included.

Note 3 to entry: Mass digitization is included.

Note 4 to entry: Purchase of electronic copies for replacing print copies is excluded.

[SOURCE: ISO 2789:2013, 2.3.15]

3.17
document
recorded information or material object which can be treated as a unit in a documentation process

Note 1 to entry: Documents can differ in form and characteristics.

[SOURCE: ISO 5127:2017, 3.1.1.38, modified — Note 1 to entry of ISO 2789:2013, 2.3.17 has been included.]

3.18
document processing
everything done to a document after it is acquired by a library, before it is placed on the shelves, including acquisition, descriptive cataloguing, subject indexing, if applicable binding, physical processing, and shelving

Note 1 to entry: For electronic documents, the end of processing will either coincide with cataloguing when the URL for a document on an external server has been added, or with the installation of the document on the library's server and the URL being added in the catalogue.

[SOURCE: ISO/TR 28118:2009, 2.13, modified — Note 1 to entry has been added.]

3.19
document retrieval
process of recovering specific documents from a *storage* (3.87) place

[SOURCE: ISO 5127:2017, 3.10.1.03, modified — The term "placement" has been excluded in the definition.]

3.20
economic impact
effect of a policy, decision, institution, or event on the economy of a given area

Note 1 to entry: Economic impact is usually measured in terms of changes in economic growth (output or value added) and associated changes in jobs (employment) and income (wages).

[SOURCE: ISO 16439:2014, 3.16, modified — The term "decision" has been added while "programme" has been excluded in the definition.]

3.21
economic impact of libraries
positive influence of libraries on the local, regional or national economic life

3.22
educational services
learning sessions and learning materials and programmes in all formats for children and adults for the purpose of enhancing skills in library and information use

Note 1 to entry: This includes the provision of services for schools and the cooperation with other libraries in preparing and offering educational services.

Note 2 to entry: Education of librarians is excluded.

3.23
effectiveness
measure of the degree to which given objectives are achieved

Note 1 to entry: An activity is effective if it maximizes the results it was established to produce.

[SOURCE: ISO 11620:2014, 2.15]

3.24
efficiency
measure of the utilisation of resources to realize a given objective

Note 1 to entry: An activity is efficient if it minimizes the use of resources, or produces better performance with the same resources.

[SOURCE: ISO 11620:2014, 2.16]

3.25
electronic collection
digital collection
all resources in electronic form in the *library collection* (3.43), whether born digital or digitized

Note 1 to entry: The electronic collection includes databases, electronic serials, and *digital documents* (3.15). *Free Internet resources* (3.31) which have been catalogued by the library in its *online catalogue* (3.61) or a database are excluded.

Note 2 to entry: The resources can be networked, installed on stand-alone workstations or stored on physical carriers.

[SOURCE: ISO 2789:2013, 2.3.21, modified — The term "digital collection" has been added as an accepted term.]

3.26
electronic document delivery
<mediated>electronic transmission of a document or part of a document from the *library collection* (3.43) to a user, mediated by library staff not necessarily via another library

Note 1 to entry: Electronic transmission of documents to members of the *population to be served* (3.67) is included. Fax transmission is excluded.

Note 2 to entry: May be split up as to transmission with or without charge to the user.

Note 3 to entry: Unmediated downloading by users from the *electronic collection* (3.25) of the library is excluded.

[SOURCE: ISO 2789:2013, 2.2.7]

3.27
electronic service
library service delivered via electronic means whether from local servers or provided via networks

Note 1 to entry: Electronic library services include the *online catalogue* (3.61), the *library website* (3.46), the *electronic collection* (3.25), electronic lending, electronic document delivery (mediated), electronic *reference service* (3.77), *user training* (3.94) by electronic means, services for mobile *devices* (3.51), services for interactive use (including services on social networks), and Internet access offered via the library.

Note 2 to entry: This does not include booking physical services (e.g. rooms or library tours) by electronic means.

[SOURCE: ISO 2789:2013, 2.2.8]

3.28
evaluation
process of estimating the effectiveness, efficiency, utility and relevance of a service or facility

[SOURCE: ISO 11620:2014, 3.19]

3.29
event
pre-arranged activity with cultural, educational, social, political, scholarly, or other intent

EXAMPLE Exhibitions, author visits, literary discussions, workshops, etc.

Note 1 to entry: Only events arranged by the library on its own or in partnership with other institutions are included, whether inside or outside the library premises. Events inside the library premises organized by institutions outside the library without the library's cooperation are excluded.

Note 2 to entry: *User training* (3.94) lessons and library tours are excluded.

Note 3 to entry: Ongoing programmes are included. Each session of a programme is counted as one event.

Note 4 to entry: Virtual events are included.

[SOURCE: ISO 2789:2013, 2.2.9]

3.30
focus group interview
focus group discussion
group interview in the form of a moderated discussion among a small number of selected individuals on topics introduced by the moderator

[SOURCE: ISO 16439:2014, 3.23]

3.31
free Internet resource
Internet resource with unrestricted (open) access for which no payment is required

[SOURCE: ISO 2789:2013, 2.3.23]

3.32
full-time equivalent
FTE
measurement equal to one staff person working a full-time work schedule for one year

Note 1 to entry: For example, if out of three persons employed as librarians, one works quarter-time, one works half-time, and one works full-time, then the FTE of these three persons would be 0,25 + 0,5 + 1,0 = 1,75 librarians (FTE).

Note 2 to entry: Not all libraries may use the same number of hours per year to determine an FTE. Thus, any comparative measures between libraries may need to consider any differences in hours.

[SOURCE: ISO 11620:2014, 2.23]

3.33
goal
desired state of affairs to be achieved by the implementation of agreed policies

[SOURCE: ISO 11620:2014, 2.24]

3.34
homepage
main or opening screen of a website to which all other pages for users are linked

[SOURCE: ISO 5127:2017, 3.3.3.26]

3.35
impact
difference or change in an individual or group resulting from the contact with library services

Note 1 to entry: The change can be tangible or intangible.

[SOURCE: ISO 16439:2014, 3.25]

3.36
income generated
income generated by library operations and from fees, charges, subscriptions and donations that is available to the library for expenditure

[SOURCE: ISO/TR 28118:2009, 2.24]

3.37
indicator
expression (which may be numeric, symbolic or verbal) used to characterize activities (events, objects, persons) both in quantitative and qualitative terms in order to assess the value of the activities characterized, and the associated method

[SOURCE: ISO 11620:2014, 2.25]

3.38
information literacy
ability to recognize a need for information, to identify, retrieve, evaluate, and use information effectively and to use information in an effective and responsible way

Note 1 to entry: Literacy in the sense of being able to read and write with a minimal level of proficiency is fundamental for information literacy.

Note 2 to entry: This includes the skills for using information technology to access and retrieve information.

[SOURCE: ISO 16439:2014, 3.26, modified — The phrase "and to use information in an effective and responsible way" has been added in the definition.]

3.39
informational question
directional and/or administrative inquiry delivered to library staff

Note 1 to entry: This includes questions for locating staff or facilities, questions regarding opening times and registering procedures and questions about handling equipment such as printers or computer terminals.

Note 2 to entry: The question can be delivered personally or by means of telephone, regular mail, fax or electronic media (via email, the *library website* (3.46) or other networked communication mechanisms).

Note 3 to entry: For reference questions, see 3.76.

[SOURCE: ISO 2789:2013, 2.2.13]

3.40
input
contribution of resources in support of a libraryEXAMPLE Examples of resources are funding, staff, collections, space, equipment.

[SOURCE: ISO 16439:2014, 3.28, modified — Examples in the definition has been formatted separately for clarity.]

3.41
interlibrary loan
loan of a document in its physical form or delivery of a document, or part of it, in copied form, from one library to another which is not under the same administration

Note 1 to entry: Mediated transmission of electronic documents is counted as *electronic document delivery* (3.26).

[SOURCE: ISO 2789:2013, 2.2.16, modified — Note 2 to entry has been omitted.]

3.42
interview
oral questioning technique which results in a transfer of information from the interviewee to an interviewer or researcher

Note 1 to entry: This technique obtains direct reactions to questions, in contrast to written questionnaires or *self-assessment* (3.80) [*self-recording* (3.81)].

Note 2 to entry: Interviews can be subdivided according to the number of interviewees into one-to-one interviews and group interviews.

Note 3 to entry: Interviews can be structured, semi-structured or unstructured.

Note 4 to entry: Where semi-structured or unstructured interviews are used with a group of respondents, these are usually described as focus groups or group discussions.

[SOURCE: ISO 16439:2014, 3.30]

3.43
library collection
documents provided by a library for its users

Note 1 to entry: Comprises information resources held locally and remote resources for which access rights have been acquired.

Note 2 to entry: Access rights can be acquired by the library itself, by a consortium and/or through external funding.

Note 3 to entry: Acquisition is to be understood as deliberately selecting a document, securing access rights and including it in the *online catalogue* (3.61) or other databases of the library. Interlibrary lending and document delivery are excluded.

Note 4 to entry: Does not include links to Internet resources for which the library has not secured access rights by legal agreements (e.g. legal deposit right), license or other contractual and/or cooperative agreement. *Free Internet resources* (3.31) which have been catalogued by the library in its online catalogue or a database should be counted separately.

[SOURCE: ISO 2789:2013, 2.3.28]

3.44
library employee
person who works for a library in return for payment

[SOURCE: ISO 2789:2013, 2.7.1]

3.45
library staff research publication
research publication by library staff in professional and academic subjects

Note 1 to entry: Includes publications in all formats, and presentations at conferences.

[SOURCE: ISO 2789:2013, 2.5.4]

3.46
library website
unique domain on the Internet consisting of a collection of web pages that is published by a library to provide access to the library's services and resources

Note 1 to entry: The pages of a website are usually interconnected by the use of hypertext links.

Note 2 to entry: Excludes documents that fit the definitions of *electronic collection* (3.25) and *free Internet resources* (3.31) that may be linked from the library website.

Note 3 to entry: Excludes web services in the library's domain that are operated on behalf of other organizations.

[SOURCE: ISO 2789:2013, 2.2.18]

3.47
loan
direct lending or delivery transaction of a returnable item in non-electronic form (e.g. book), of an electronic document on a physical carrier (e.g. CD-ROM) or other device (e.g. eBook reader), or transmission of an electronic document to one user for a limited time period (e.g. eBook)

Note 1 to entry: Renewals are excluded but could be counted separately.

Note 2 to entry: Loans include registered loans within the library (on-site loans).

Note 3 to entry: Loans include copied documents supplied in place of original documents (including fax) and printouts of electronic documents made by library staff for the user.

Note 4 to entry: Loans of documents in physical form to distance users are included.

Note 5 to entry: Mediated electronic transmission of documents is counted as *electronic document delivery* (3.26) if their use is permitted for unlimited time. This includes transmissions to members of the *population to be served* (3.67).

[SOURCE: ISO 2789:2013, 2.2.19, modified — Note 6 to entry has been omitted.]

3.48
longitudinal study
two or more *surveys* (3.88) in which the same or a similar survey instrument is administered more than once to the same population, after a suitable time period has elapsed, to measure changes in patterns of usage, perceptions, attitudes, etc.

[SOURCE: ISO 16439:2014, 3.35]

3.49
mass conservation
conservation (3.10) measure of simultaneous treatment of a large number of documents by automated conservation techniques

[SOURCE: ISO 5127:2017, 3.12.6.35]

3.50
mission
statement approved by the authorities formulating the organization's *goals* (3.33) and its choices in services and products development

[SOURCE: ISO 11620:2014, 3.33]

3.51
mobile device
portable computing device, designed to be held and used in the hands, typically having a display screen with touch, pen and/or keyboard input and Internet connection

EXAMPLE Mobile phone, eBook reader, tablet.

[SOURCE: ISO 2789:2013, 2.2.20, modified — A list of examples has been added.]

3.52
monetary value of libraries
value of library benefits calculated in monetary terms

3.53
national bibliography
bibliography in which documents published in a single country are recorded and described

Note 1 to entry: In some countries, the national bibliography also covers foreign publications relative to the country and also the works by their nationals which are published abroad.

[SOURCE: ISO 9707:2008, 2.21]

3.54
national collection
collection of the *national library* (3.56) of the *national imprint* (3.55) and the national documentary heritage in the form of manuscripts, archival materials, cartographic material, printed music documents, pictures, photographs and audio-visual documents in conventional or electronic format

Note 1 to entry: Websites can be part of the national collection.

[SOURCE: ISO/TR 28118:2009, 2.36]

3.55
national imprint
all documents in all formats published in a country

Note 1 to entry: Includes *commercial* (3.9) and *non-commercial publications* (3.57).

[SOURCE: ISO/TR 28118:2009, 2.37]

3.56
national library
library that is responsible for acquiring and conserving copies of all relevant documents published in the country in which the library is located

Note 1 to entry: A national library will also normally perform some or all of the following functions: produce the *national bibliography* (3.53); hold and keep up to date a large and representative collection of foreign literature including documents about the country; act as a national bibliographic information centre; compile union catalogues; supervise the administration of other libraries and/or promote collaboration; coordinate a research and development service; etc.

Note 2 to entry: The definition of "national library" allows for more than one national library in a country.

[SOURCE: ISO 2789:2013, 2.1.9]

3.57
non-commercial publication
document in all formats published by non-profit institutions such as communities, associations, initiatives, etc., or by individuals, often not available through normal book trade channels

Note 1 to entry: Non-commercial publications can include reports, theses and dissertations, periodicals, conference proceedings, etc.

[SOURCE: ISO 2789:2013, 2.3.37, modified — The phrase “or by individuals” has been added in the definition.]

3.58
non-user
person belonging to a specific library's *population to be served* (3.67) but not using that library's physical and/or *electronic services* (3.27)

Note 1 to entry: The definition includes former users of the library.

Note 2 to entry: For *national libraries* (3.56), every person not using the library can be regarded as a non-user.

[SOURCE: ISO 16439:2014, 3.39, modified — Note 2 to entry has been added.]

3.59
objective
specific target for an activity to be attained as a contribution to achieving the *goal* (3.33) of an organization

[SOURCE: ISO 11620:2014, 2.34]

3.60
observation
method of data collection in which the situation of interest is watched and the relevant facts, actions and behaviours are recorded

Note 1 to entry: This includes direct observation by researchers, observation by technical devices, e.g. via video recording or log analysis, and self-observation by users.

Note 2 to entry: There can be rating scales that the researcher would use when observing the behaviour.

[SOURCE: ISO 16439:2014, 3.41, modified — a new Note 1 to entry has been added and the former Note has been renumbered.]

3.61
online catalogue
database of bibliographical records describing the collection usually of one particular library or library system

[SOURCE: ISO 2789:2013, 2.2.21]

3.62
open access
unrestricted access to information, documents or information services

Note 1 to entry: In a narrower sense, this means that information content is made freely available via the Internet.

[SOURCE: ISO 16439:2014, 3.42]

3.63
open stacks
stacks that are accessible to users

Note 1 to entry: Antonym: *closed stacks* (3.8).

[SOURCE: ISO 16439:2014, 2.58]

3.64
output
products of library processes EXAMPLE Number of titles catalogued, number of loans, number of reference questions answered.

[SOURCE: ISO 16439:2014, 3.45, modified — examples of output have been formatted separately for clarity.]

3.65
performance
effectiveness of the provision of services by the library and the efficiency of the allocation and use of resources in providing services

[SOURCE: ISO 11620:2014, 2.38]

3.66
performance indicator
numerical, symbolic or verbal expression, derived from library statistics and data used to characterize the performance of a library

[SOURCE: ISO 11620:2014, 2.39]

3.67
population to be served
number of individuals for whom the library is set up to provide its services and materials

Note 1 to entry: For public libraries, this will normally be the population of the legal service area (authority); for libraries of an institution of higher education, this will normally be the total of academic and professional staff plus students.

[SOURCE: ISO 11620:2014, 2.40]

3.68
preservation
measures taken, including financial and strategic decisions, to maintain and extend the integrity of documents or collections

[SOURCE: ISO 5127:2017, 3.2.1.39, modified — Notes to entry have been omitted.]

3.69
process
set of interrelated or interacting activities which transforms inputs into outputs

EXAMPLE Cataloguing, lending, reference service.

[SOURCE: ISO 16439:2014, 3.50]

3.70
publication
document offered for general distribution or sale and usually produced in multiple copies

[SOURCE: ISO 5127:2017, 3.1.8.27]

3.71
qualitative data
data describing but not measuring the attributes or properties of an object, in particular the reasons for human actions

Note 1 to entry: The attributes can be categorized into classes that may be assigned numeric values.

[SOURCE: ISO 16439:2014, 3.52]

3.72
quality
degree to which a set of inherent characteristics fulfils requirements

Note 1 to entry: The term "quality" can be used with adjectives such as poor, good or excellent.

Note 2 to entry: "Inherent", as opposed to "assigned", means existing in something, especially as a permanent characteristic.

[SOURCE: ISO 9000:2005, 3.1.1]

3.73
quantitative data
data in numerical form expressing a certain quantity, amount or range, amenable to statistical manipulation

Note 1 to entry: Quantitative data are usually expressed in measurement units, e.g. number of loans, percentage of interviewees visiting the library.

[SOURCE: ISO 16439:2014, 3.54]

3.74
questionnaire
set of questions for a *survey* (3.88) or a structured or semi-structured interview

Note 1 to entry: The questions may be closed (answerable by checking one of several predetermined answers) or open (requiring participants to answer in their own words).

Note 2 to entry: The questionnaire may be paper-based or in electronic form.

[SOURCE: ISO 16439:2014, 3.55, modified — Note 2 to entry has been added.]

3.75
rare material
incunabula, manuscripts (including fragments and rolls, autographs, music manuscripts), books published before 1800 and newer books that are made precious by their limited issue, by their binding, by dedications, and similar characteristics

Note 1 to entry: The definition excludes archives and records concerning private persons, institutions and organizations (collections containing letters, notes, photos, and other material given by bequest to the library or purchased as such by, or on behalf of, the library).

Note 2 to entry: Usually such items will belong to *special collections* (3.83) with special shelf marks and will be shelved separately in a secure location to which access is restricted.

Note 3 to entry: The time limit for rare books may differ in countries.

[SOURCE: ISO 2789:2013, 2.3.46, modified — the term has been changed from "rare book" to "rare material" to include other manuscripts enumerated in the modified definition; Notes 1 and 3 to entry have been added.]

3.76
reference question
information contact that involves the knowledge or use of one or more information sources (such as printed and non-printed materials, machine-readable databases, the library's own and other institutions' catalogues) by library staff

Note 1 to entry: Adapted from ANSI/NISO Z39.7-2004.

Note 2 to entry: May also involve recommendations, interpretation, or instruction in the use of such sources.

Note 3 to entry: One reference question may address several issues.

Note 4 to entry: The question can be delivered personally or by means of telephone, regular mail, fax or electronic media (via email, the *library website* (3.46)or other networked communications mechanisms).

Note 5 to entry: It is essential that libraries do not include informational (directional and administrative) questions, e.g. for locating staff or facilities, regarding opening times or about handling equipment such as printers or computer terminals (see 3.39).

[SOURCE: ISO 2789:2013, 2.2.26]

3.77
reference service
provision of information and assistance, in response to requests, by an information and documentation organization

[SOURCE: ISO 2789:2013, 2.2.27]

3.78
reliability
degree to which a measure repeatedly and consistently produces the same result

[SOURCE: ISO 11620:2014, 2.44]

3.79
restoration
preservation actions taken to return a document or other material object which has suffered deterioration or damage as closely as practicable to its original state

Note 1 to entry: In archival restoration, no attempt is made to recreate missing text, etc. and all restoration work is kept clearly evident.

[SOURCE: ISO 5127:2017, 3.12.1.02]

3.80
self-assessment
process of critically reviewing the quality of one's own skills, knowledge, or confidence

Note 1 to entry: The reviewing is normally done through a paper-based or online questionnaire where some or all of the questions require respondents to rate themselves on a scale.

[SOURCE: ISO 16439:2014, 3.62]

3.81
self-recording
users' record of their behaviour and/or attitudes in information seeking and information use over a period of time, usually in the form of a diary

Note 1 to entry: The record can be used for identifying library impact.

Note 2 to entry: The diary can be structured giving a guideline to what should be observed, or unstructured, leaving the choice of subjects to the writer.

[SOURCE: ISO 16439:2014, 3.63]

3.82
social impact
influence of a library's existence and services on the population in a given area or on society in general

[SOURCE: ISO 16439:2014, 3.64, modified — the phrase "in the surrounding community" has been replaced by "in a given area".]

3.83
special collection
collection of materials segregated from a *library collection* (3.43) according to form, subject, genre, period, geographical area, condition, rarity, source, or value

Note 1 to entry: Special collections are usually administered separately.

Note 2 to entry: Access to special collections may be restricted.

[SOURCE: ISO 16439:2014, 3.63]

3.84
special grant
grant of a non-recurrent nature to fully or partially fund projects

[SOURCE: ISO 2789:2013, 2.6.4, modified — definition has been rephrased for clarity]

3.85
stable condition
suitability for use

Note 1 to entry: Stable material may have some damage, but can be used without immediate risk of further damage. Unstable material will be further damaged if used.

[SOURCE: ISO/TR 28118:2009, 2.51]

3.86
staff training
formal pre-planned training in professional skills and competences, including social skills

Note 1 to entry: The training can be held in-house, externally or online and hosted by library staff or external experts.

Note 2 to entry: Employee induction programmes are included.

Note 3 to entry: Informal training, e.g. point-of-use training, is excluded.

[SOURCE: ISO 2789:2013, 2.7.6, modified — Notes to entry 1 and 2 have been added.]

3.87
storage
preservation measures for keeping documents under defined conditions and permitting their retrieval or that of the information contained in them

[SOURCE: ISO 5127:2017, 3.12.1.05]

3.88
survey
method of data collection using written questionnaires for gathering information from the whole or a sample of a defined population

Note 1 to entry: The survey can consider *users* (3.91) and *non-users* (3.58).

Note 2 to entry: The survey can be conducted face to face, via hand-outs, telephone, email, or Internet.

Note 3 to entry: In a *longitudinal study* (3.48), the same or a similar survey instrument is administered more than once, after a suitable interval of time has elapsed, to measure changes in patterns of usage, perceptions, attitudes, etc.

[SOURCE: ISO 16439:2014, 3.67, modified — Notes to entry 1 and 3 have been added.]

3.89
target population
groups of actual and potential users appropriate to an individual library as the object of a specific service or as the primary users of specific materials

[SOURCE: ISO 11620:2013, 2.49]

3.90
title
words or symbols at the head of a document that identify it and normally distinguish it from other documents

Note 1 to entry: For measuring purposes, "title" describes a document which forms a separate item with a distinctive title, whether issued in one or several physical units, and disregarding the number of copies of the document held by the library.

[SOURCE: ISO 5127:2017, 3.7.4.1, modified — Note 1 has been added from ISO 11620:2014, 3.50.]

3.91
user
recipient of library services

Note 1 to entry: The recipient can be a person or an institution, including libraries.

Note 2 to entry: Library services include electronic services, physical services and visiting the library premises.

[SOURCE: ISO 2789:2013, 2.2.36]

3.92
user place
place provided for users for reading or studying, whether with or without seating or equipment

Note 1 to entry: Includes places in carrels, in seminar and study rooms, and in the audio-visual and children's departments of the library, and informal seating in lounges, group areas, etc.

Note 2 to entry: Excludes places in halls, lecture and auditory theatres intended for audiences of special events. Also excludes floor space and cushions on which users may sit.

[SOURCE: ISO 2789:2013, 2.4.11]

3.93
user satisfaction survey
survey administered to the whole or to a sample of a library’s users to find out how they rate the quality of their library experiences, and any suggestions for improvement

Note 1 to entry: The survey can contain questions about user status, how often and how they normally use the resources and services the library provides.

[SOURCE: ISO 16439:2014, 3.72, modified — Notes 1 and 3 have been omitted.]

3.94
user training
training programme set up with a specified lesson plan, which aims at specific learning outcomes for the use of library and other information services

Note 1 to entry: User training can be offered as a tour of the library, as library tuition, or as a web-based service for users.

Note 2 to entry: The duration of lessons is irrelevant.

[SOURCE: ISO 2789:2013, 2.2.37]

3.95
validity
degree to which an indicator actually measures what it is intended to measure

[SOURCE: ISO 11620:2014, 2.55]

3.96
value
importance that stakeholders (funding institutions, politicians, the public, users, staff) attach to libraries and which is related to the perception of actual or potential benefit

Note 1 to entry: Monetary value can be included.

[SOURCE: ISO 16439:2014, 3.75]

3.97
virtual visit
online visit
one continuous cycle of user activities on the *library website* (3.46) by users from outside the library's IP address space (usually from outside the library premises), regardless of the number of pages or elements viewed

Note 1 to entry: A virtual visit typically starts when a user accesses the library website after visiting an external page, and ends if no activity has been recorded for a defined period of time, e.g., a maximum of 30 minutes. Another access after a longer interval initiates a new visit.

Note 2 to entry: A virtual visitor should at least be identified by a unique cookie and/or by a unique combination of the user's IP address and browser string (user agent). Known web spiders and harvesters should be excluded.

[SOURCE: ISO 2789:2013, 2.2.39]

3.98
visit
person (individual) entering the library premises

[SOURCE: ISO 2789:2013, 2.2.40]

4 Quality assessment in national libraries

4.1 Mission and functions of national libraries

4.1.1 General

Before defining quality criteria for a specific type of library, it will be necessary to state clearly:

— what that type of library is meant to achieve;

— what functions it should perform;

— what target groups it should serve;

— what needs and wishes of those target groups it should consider.

National libraries have important tasks that distinguish them from other libraries, such as the collection and preservation of the national documentary heritage, the publication of a national bibliography and a leading role in cooperation.

The roles of national libraries can differ from country to country. National libraries are unique institutions in their respective countries, and their tasks and activities are not easily comparable. In addition, they may have several roles (e.g. university and national library, parliamentary and national library, or national archive and national library), which complicates finding collective characteristics.

Allowing for such differences, this document defines a mission statement and a set of functions for national libraries. The following overview is the basis for the identification of quality issues in national libraries and for the selection of methods for the assessment of such quality.

4.1.2 Mission statement for national libraries

National libraries have special responsibilities, often defined in law, for a country's cultural heritage. They collect and preserve the national documentary heritage and provide and ensure permanent access to the knowledge and culture of the past and present. They take a leading role in the library and information sector, often developing central services within that area.

4.1.3 Core functions of national libraries

4.1.3.1 Collection

The main tasks are:

— to collect the national imprint (both print and electronic), generally via legal deposit;

— to collect the Internet resources of the national domain as part of the cultural heritage;

NOTE 1 The task of web archiving is more and more included in legal deposit legislation. It can also be operated as a shared task between the national library and other institutions.

— to collect the national documentary heritage in the form of manuscripts, archival materials, cartographic material, printed music documents, pictures, photographs and audio-visual documents, including electronic formats;

NOTE 2 Such types of documents are also often collected by national archives or other national cultural heritage institutions.

— to include items representing the country's cultural diversity;

— to collect foreign publications in the national language(s) and/or about the country, including foreign publications by authors from the country;

— to maintain a collection of foreign publications, either universal or restricted to subjects, such as humanities.

4.1.3.2 Metadata

The main tasks are:

— to make the collections visible and accessible by online catalogues;

— to create the national bibliographic record;

— to open up the library's own metadata for reuse.

4.1.3.3 Preservation

The main tasks are:

— to preserve the national documentary heritage in all formats and thus ensure the long-term access to the collections;

— to develop and promote disaster management plans;

— to safeguard the content of original documents in their original form and/or on alternative formats/ materials.

4.1.3.4 Services

The main tasks are:

— to provide quick and easy access to the collections for research, learning, and personal or institutional development;

— to provide online access to the collections by digitizing relevant materials;

— to offer onsite reader services;

— to provide services (e.g. reference, bibliography, lending, and document delivery) to users both directly and through other library and information centres;

— to offer suitable services for persons with special needs.

4.1.3.5 Cultural representation

The main tasks are:

— to promote the national documentary heritage by exhibitions and other cultural events, including digital events, inside and outside the country;

— to represent the cultural diversity of the country.

4.1.3.6 Cooperation

The main tasks are:

— to engage in library and information affairs on a national and international basis;

— to join in library and information research;

— to cooperate nationally and internationally with libraries and other institutions such as museums and archives;

— to support research networks, through partnerships and cooperative projects with universities and research centres.

4.1.3.7 Management

The main tasks are:

— to ensure effectiveness and cost-efficiency by innovative technology and adequate management methods;

— to provide for staff development.

4.1.4 Additional functions of national libraries

4.1.4.1 Leading role in the national library system

The tasks can be:

— to provide a centre for library education;

— to serve as a national forum for international programmes and projects;

— to provide central services for libraries, such as the National Union Catalogue, the national digital library, a national centre for digitization, or a national repository of scientific research and research data;

— to develop digital preservation policies;

— to coordinate interlibrary loan;

— to coordinate and/or provide for national library statistics;

— to coordinate and/or provide for national licences of databases and e-journals;

— to join in the development of library standards;

— to provide a centre for international standard numbers;

— to join in the development of the national information policies.

4.1.4.2 Research on the library's collections

The tasks can be:

— to document and describe specific collections in the most scholarly way;

— to carry out scholarly work on collection objects such as scholarly editing;

— to initiate and support research projects on collection objects;

— to present the results of the research work to the public in the form of publications, databases, and exhibitions, preferably in digital format;

— to support digital humanities, for example, by a platform for research in digitized textual collections.

4.1.4.3 Educational role

The tasks can be:

— to support learning and education by offering learning sessions, learning materials and programmes for children and adults;

— to provide services for schools;

— to cooperate with other libraries in preparing and offering educational services;

— to promote literacy and digital literacy.

4.1.4.4 Services for the government

The task can be:

— to provide services to the legislative, executive and judicial branches of government.

4.2 Target groups of national libraries

National libraries have no specified and largely homogeneous clientele or primary user group, unlike public libraries, university libraries, school libraries and most special libraries. Their current and potential users may come from diverse social and cultural backgrounds and will have various needs and interests. Nevertheless, it is possible to identify several key target groups.

The following listing follows partly the British Library's description of its "five key audiences" (see Reference [30]):

a) researchers: those doing research for academic, commercial or personal reasons; this includes future research;

b) educators and learners: from schoolchildren to teachers and lifelong learners;

c) general public: all members of the public, inside and outside the country;

d) visitors at events;

e) the library and information network: libraries and other information-focused organizations;

f) publishers and authors;

g) public administration.

In certain cases, another target group can be added:

h) business: all types of commercial ventures from individual entrepreneurs and small- and medium-sized enterprises to multi-national corporations.

NOTE Visitors to the library premises or to the virtual library can belong to all of the above mentioned groups.

4.3 Quality criteria in national libraries

4.3.1 Quality criteria that apply to all types of libraries

There are a number of quality criteria that are relevant for nearly all types of libraries, such as:

— user-orientation: library products and services that are aligned with the needs of the population or of specific target groups;

— accuracy, reliability, speed: services delivered consistently, correctly, reliably and with adequate speed;

— accessibility: ease of access to the building and to all services (e.g. adequate opening times, usability of the website, understandable language in all communications);

— competence, helpfulness: well-trained, friendly and responsive staff with high communication skills;

— cost-effectiveness: well-organized processes, services produced with a minimum of resources;

— adequate staff development: systematic training for all staff members.

4.3.2 Specific quality criteria for national libraries

Quality issues for the specific functions of national libraries can be seen as follows:

— the collection's coverage of the national imprint;

— the timeliness and comprehensiveness of the national bibliography;

— the effort invested in the preservation of the national documentary heritage;

— the promotion of the documentary cultural heritage by digitizing and events;

— the national and international engagement of the library.

4.4 Methods for quality assessment in national libraries

This document describes two different options for assessing the quality of a national library's services and products:

1) Performance measurement: Performance or quality indicators described in Clause 5 and Annex A measure the effectiveness and cost-efficiency of library services.

   NOTE This includes user satisfaction surveys that are applied for assessing the perceived quality, the users' estimate of library services.

2) Impact assessment: The methods proposed in Clause 6 try to prove the value and benefit of national libraries to individual users and society.

This document does not deal with quality models such as ISO 9000 or EFQM (European Foundation for Quality Management).

5 Performance indicators for national libraries

5.1 General

For the following subclause, especially for the general description of performance indicators and their use, this document relies on ISO 11620.

This document selects performance indicators out of ISO 11620 that are appropriate to the tasks of national libraries or can be adapted to such tasks. For the specific functions of national libraries, additional indicators have been identified that have been used or tested by one or more national libraries.

All performance indicators specified in Annex A fulfil the criteria presented in 5.3 and are specified according to the descriptive framework presented in 5.4.

5.2 Use of performance indicators

5.2.1 General

The purposes of library performance indicators are:

— to function as tools to assess the quality and effectiveness of services, resources, and other activities provided by a library, and

— to assess the efficiency of resources allocated by the library to such services and activities.

As a library evaluation tool, performance indicators have four principal objectives:

1) to facilitate control in the management process;

2) to monitor the continual development of library services;

3) to serve as a basis for reference and for dialogues between library staff, funding bodies, and the user community;

4) to serve in comparative analysis of the performance of libraries and information services which have equivalent missions or objectives.

5.2.2 Selection of performance indicators

The performance indicators included in this document are those seen to be most useful for national libraries, corresponding to the main functions of national libraries. This document recognizes that there are different types of national libraries, in different settings, having a range of unique characteristics (structure, funding, governance, etc.), and affected by a number of situational factors that impact on the services and resources that the libraries can provide. Therefore, possibly not all performance indicators in this document may have the same relevance for all national libraries. On the other side, national libraries may employ additional indicators not specified within this document.

National libraries, in consultation with their funding institutions and relevant authorities, such as the national government, as well as their users and other stakeholders, will need to decide which indicators are most appropriate to a particular situation. This decision shall be made in the light of the mission, goals and objectives of the library. It is desirable that all interested parties should be in agreement on the appropriateness of the performance indicators used.

5.2.3 Limitations of performance measurement

5.2.3.1 Optimizing scores on performance indicators

Users of library performance indicators should recognize that it is impossible to achieve optimum scores simultaneously on all performance indicators. For example, a library may achieve a high level of user satisfaction, but incur high staff costs. The scores of performance indicators shall be interpreted in the light of what the library intends to accomplish, and not simply in terms of optimizing scores on particular indicators.

5.2.3.2 Comparability of performance indicator data

A primary purpose of using library performance indicators is self-diagnosis. This may include longitudinal studies that compare one year's performance with another, within the same library.

A secondary purpose is to encourage meaningful and useful comparisons across different libraries. Standardizing performance indicators and the procedures for collecting those data assist in that process. However, such comparisons shall always be made with respect for each library's:

a) mission, goals, and objectives;

b) resources;

c) user groups;

d) governance structure;

e) procedures.

If comparisons of performance indicator scores across different libraries are made, they should be done with considerable care and in full recognition of the limitations of such comparisons.

5.3 Criteria for performance indicators

The following criteria should be used to test a performance indicator.

a) Informative content**.** The indicator should be informative as a tool for measuring an activity, for identifying achievements, and for identifying problems and shortcomings in the performance of the library so that action can be taken to remedy these. It should provide information for decision-making, such as goal setting, budget allocation, prioritizing services and activities, etc.

b) Reliability**.** A performance indicator must be reliable in the sense that it consistently produces the same result when used repeatedly under the same circumstances.

c) Validity**.** The indicator must be valid in that it must measure what it is intended to measure.

   NOTE 1 That some indicators are indirect indicators or rough estimates does not in itself mean that they are not valid.

d) Appropriateness**.** The indicator must be appropriate for its intended purpose. That is, the units and scale must be suitable, and the operations necessary to implement the process of measurement should be compatible with the library's procedures, physical layout, general environment, etc.

e) Practicality**.** The indicator should be practical in the sense that it uses data that the library can produce with a reasonable amount of effort in terms of staff time, staff qualifications, operational costs and users' time and patience.

If the indicator is intended for comparisons between libraries, a sixth criterion applies.

f) Comparability. A library performance indicator allows comparisons between libraries if the same score, making allowance for the accuracy of the score, means the same level of quality of services or the same level of efficiency in the libraries to be compared.

It is vital to ensure that the activities being measured are comparable.

NOTE 2 This criterion is sufficient for ranking libraries according to the score of the performance indicator, but is not sufficient to determine, for example, that a library with twice the score of another is twice as good.

5.4 Descriptive framework

5.4.1 General

Each indicator is presented in the standard format described in this subclause.

5.4.2 Name

Each performance indicator shall have a unique, descriptive name.

5.4.3 Background

The background statement describes the actual state and importance of the service, activity or aspect the performance indicator is meant to measure.

The statement shows what is regarded as quality in the service, activity or aspect in national libraries and what measures/performance indicators have as yet been used for assessing that quality.

5.4.4 Objective of the performance indicator

The objective of the performance indicator indicates what the indicator is meant to measure in relation to the library's goals.

It describes what types of services or activities would benefit most from using the performance indicator and limitations in the application of the indicator.

It explains under what circumstances comparison of results with other national libraries may be possible.

5.4.5 Definition of the performance indicator

The definition describes the data that are necessary for the performance indicator and their relation.

Unambiguous terms used in the customary sense need not be defined.

5.4.6 Method(s)

This subclause describes the way in which the data are collected and results are calculated.

If more than one method has been shown to be effective for the same purpose, several methods are described. The descriptions supplied shall not include general statistical methodology such as sampling procedures, sampling sizes, estimates of confidence intervals, statistical tests, etc.

If a measure needs to be repeated to determine the value of the performance indicator, this shall be stated clearly.

If possible, the descriptions of methods shall indicate the effort necessary for preparation, data collection and analysis of results.

5.4.7 Interpretation and use of results

This subclause discusses how the results might be interpreted, especially reasons for low effectiveness. It points to difficulties and to circumstances that could affect the results.

The statement names possible reactions to the results in order to achieve better results and explains what other performance indicators might be useful in the same context.

The interpretation statement may include information about the variability to be expected, such as seasonal variations or variations in time of day.

5.4.8 Source(s)

References are supplied to document the source of the indicator. The description should state clearly whether the indicator as described in this document is a modified version of the indicator described in the source document.

If the name of the indicator is different from the one used in the source, the original name is supplied in parentheses after the reference.

5.4.9 Examples and further reading (optional)

The references given here include documents supplying more detailed information about the use of the indicator, especially in national libraries, methods of data collection and analysis, etc.

If possible, examples are given of results when using this or a similar performance indicator, in order to show the range of results that may be possible and to help libraries in interpreting their own results.

5.5 List of performance indicators for national libraries

Table 1 lists the main functions and activities of national libraries. The performance indicators described in this document are grouped with the functions and activities to which they relate, and reference is given to Annex A which specifies how the indicators shall be calculated and used.

Table 1 — List of performance indicators for functions and activities of national libraries

Core function	Performance indicator	Adapted from ISO 11620
1 Collection		
1.1 Collection building	A.1.1.1 Percentage of national publications acquired by the national library	
	A.1.1.2 Percentage of required national imprint titles in the collection	B.1.1.2
	A.1.1.3 Usage of foreign publications acquired during the last 3 years	
1.2 Cataloguing	A.1.2.1 Coverage of the national imprint in the new entries of the national bibliography	
	A.1.2.2 Percentage of rare materials accessible via web catalogues	
	A.1.2.3 Median time of document processing	B.3.2.2
1.3 Digitization	A.1.3.1 Number of documents digitized per 1 000 documents in the collection	
	A.1.3.2 Percentage of documents digitized per special collection	
	A.1.3.3 Number of content units accessed per document digitized	B.2.1.5

Table 1 *(continued)*

Core function	Performance indicator	Adapted from ISO 11620
1.4 Preservation	A.1.4.1 Percentage of the collection in stable condition	B.1.2.7
	A.1.4.2 Percentage of rare materials needing conservation/restoration treatment that received such treatment	B.1.2.8
	A.1.4.3 Percentage of storage space which has an appropriate environment	B.1.3.4
2 Services		
2.1. General	A.2.1.1 User satisfaction	B.2.4.2
2.2 Accessibility	A.2.2.1 Shelving accuracy	B.1.2.1
	A.2.2.2 Direct access from the homepage	
	A.2.2.3 Percentage of accesses to the online catalogue via mobile devices	
	A.2.2.4 Median time of document retrieval from closed stacks	B.1.2.2
	A.2.2.5 Speed of interlibrary lending	B.1.2.3
2.3. Reference	A.2.3.1 Correct answer fill rate	B.3.3.2
	A.2.3.2 Speed of reference transactions	B.1.2.5
	A.2.3.3 Willingness to return	B.2.4.3
2.4 Facilities	A.2.4.1 User places occupancy rate	B.2.3.1
3 Cultural role		
3.1 Events	A.3.1.1 Number of attendances per event	B.2.2.4
	A.3.1.2 Number of documents in the media per event	
3.2 Educational services	A.3.2.1 Percentage of staff time spent on educational services	
3.3 Research	A.3.3.1 Number of research publications per professional staff member	
4 Management		
4.1 Cost-effectiveness	A.4.1.1 Employee productivity in document processing	B.3.3.4
	A.4.1.2 Employee productivity in lending and delivery services	B.3.3.5
	A.4.1.3 Staff costs per title catalogued	B.3.3.6
	A.4.1.4 Staff costs per loan	
	A.4.1.5 Percentage of library means received by special grant or income generated	B.4.3.1
4.2 Staff development	A.4.2.1 Number of attendance hours at formal training lessons per staff member	B.4.2.2
	A.4.2.2 Percentage of staff time spent in training	
4.3 Cooperation	A.4.3.1 Percentage of staff in national and international cooperation and projects	B.4.2.4

6 Impact assessment in national libraries

6.1 Overview

In this clause, especially in the general definition and description of library impact and impact assessment methods, this document relies on ISO 16439. This document is restricted to the impact of national libraries and to describing methods for assessing such impact.

6.2 Definition and description of library impact

6.2.1 General

In recent years, libraries have developed and tested methods for identifying and proving their value for individuals and for society. Being able to show such proof is especially important for national libraries, as their benefits are often indirect and long-term and therefore less obvious to the general public.

6.2.2 Definition of library impact

For the purpose of this document, the following definitions apply:

— input: contribution of resources in support of a library (e.g. funding, staff, collections, space, equipment);

— process: set of interrelated or interacting activities which transforms inputs into outputs (e.g. cataloguing, lending, reference service);

— output: products of library processes (e.g. titles catalogued, loans, downloads from the electronic collection, reference questions answered, attendances at events);

— impact: difference or change in an individual or group resulting from the contact with library services;

NOTE 1 The change can be tangible or intangible.

— value: the importance that stakeholders (funding institutions, politicians, the public) attach to libraries and which is related to the perception of actual or potential benefit.

NOTE 2 Monetary value can be included.

The input is converted into output by means of processes. Output can lead to impact and finally to value.

6.2.3 Effects of library impact

6.2.3.1 General

Impact of national libraries can be roughly divided into the following areas:

a) impact on individuals;

b) impact on the library and information network;

c) cultural and social impact.

6.2.3.2 Impact on individuals

6.2.3.2.1 General

Impact on individuals generally means the influence of library contacts and library services on individual persons, but it can also concern whole groups (e.g. a research group).

This influence can have the following effects:

a) changes in skills and competences;

b) changes in attitudes and information behaviour;

c) higher success in research, study, or career;

d) individual well-being.

6.2.3.2.2 Changes in skills and competences

Changes in users' skills and competences can concern basic skills such as searching in online catalogues or databases.

Frequent use of library services can result in an increase of information literacy: the competence of formulating a search query, choosing adequate resources for the search, knowing ways for finding and procuring desired items, and above all being able to judge whether an information resource, such as a website, is relevant and reliable.

6.2.3.2.3 Changes in attitudes and behaviour

Contacts with libraries and their services can result in higher self-confidence and independence in information seeking and information use, and in increased motivation for learning.

Other examples for changes in behaviour and attitudes are as follows.

— Users become aware of the helpfulness of the library's services.

— Users learn to consult a wider range of information resources or to deal with subjects from an interdisciplinary point of view.

— As a result of library events tailored for specific groups, new user groups are attracted to libraries.

6.2.3.2.4 Higher success in research, study and career

Library services can further the success of users in research, study and learning, or in their profession. In all these areas, the following effects are possible:

— time saved in information seeking;

— improvement of research skills and critical thinking;

— better career chances by improved information literacy.

6.2.3.2.5 Impact on individual well-being

Both traditional and new web-based services of national libraries can add to the well-being of individual persons. The following aspects are important:

— the quiet atmosphere for concentrated learning and research;

— the sense of the reliability of the library's resources and their value for research;

— the possibility to learn more about personal family history;

— the options for contact and communication with other researchers working on the same topic;

— the feeling of equality for all visitors;

— the sense of inclusion in society.

6.2.3.3 Impact on the library and information network

National libraries collect the national imprint, but they also provide central services in their country and beyond, such as metadata for the national imprint, reference services and lending and document delivery, often via other library and information centres. Other central services can, for example, be a national catalogue or digital library, a centre for library education or for digitization.

National libraries engage in library and information affairs on a national and international basis. They join in library and information research and cooperate nationally and internationally with libraries and other institutions such as museums and archives.

This important role influences and benefits the national and international library and information network (libraries and librarians, archives and museums, publishers and authors and other information-focused organizations). The following issues are important:

— a saving in time and costs by using the national library's metadata and information sources;

— the assurance of the national imprint being collected, catalogued and preserved;

— the influence of standardized metadata on the quality of the catalogues and bibliographies;

— the possibility of saving storage space and preservation costs by the national library storing and preserving the national imprint;

— the reliance on the central services of the national library.

6.2.3.4 Cultural and social impact

Cultural and social impact of national libraries in the sense of this document is the influence of a national library's existence and its services on the population in the country or on society in general. The main areas of such influence are the following.

a) Participation in information and education

  — Free access to information: By giving access to political, social, scientific, economic, government and cultural information, nationally and internationally, national libraries guarantee that people can participate and make informed choices in political and social life.

  — Open access to metadata and digitized documents: This is especially important for research and learning.

  — Education and life-long learning: By providing educational services for children and adults, offering programmes for schools and supporting other libraries in the country in preparing such services, national libraries play a key role for the participation of all people in education and life-long learning.

b) National culture and identity

  — National libraries promote the culture and history of the country via exhibitions and other events and provide information about the country. Thus, they foster the national identity.

  — National libraries inspire cultural creation.

c) Cultural diversity

  — In a culturally diverse society, the national library can enable different groups to maintain their cultural heritage and thus foster diversity and support intercultural and intergenerational understanding.

d) Preservation of the cultural heritage

— The special value of national libraries for culture and society in their respective countries is their responsibility for the national documentary heritage. National libraries collect and preserve this heritage and provide and ensure permanent access to it for present and future generations.

While an impact on an individual might be produced by one-time library use, cultural and social impact will generally show only after a longer time period.

6.2.3.5 Economic value

As the positive effects of libraries on the individual user and on society are in most cases intangible, libraries have also tried to show the monetary benefit of their services.

Assessing the economic impact of libraries can have two different meanings.

a) In most studies, it means measuring the value of library services in terms of money, either by calculating replacement costs or costs of time saving, or by using user estimates.

b) In other cases, libraries have tried to show the direct positive influence on the economic life of the region or even on the national economy.

Showing a monetary value of their services is especially helpful for libraries when competing for funding with other cultural institutions. Assessing the economic value of library services constitutes a part of cultural economics, where culture is recognized as an economic factor.

Methods for establishing an economic value of library services should only be used as a complement to the general assessment of library impact on individuals, institutions and society.

6.2.4 Challenges in assessing impact

Trying to identify the impact of libraries on individuals, groups and society is a much more complex and demanding process than collecting input and output data or assessing the quality of the library’s performance. The main difficulties for assessing impact can be summarized as follows.

a) The impact is for the most part intangible and difficult to quantify.

b) The library’s influence is generally not the only and possibly not the strongest one.

c) Long-term effects cannot be ascertained if the users are not available for follow-up.

d) Qualitative data will necessarily be subjective rather than objective.

e) Library staff may require training to use the methods.

f) The expenditure of time and effort can be considerable.

6.2.5 Use of impact assessment results

6.2.5.1 General

The methods and techniques defined and described in this document can be used for the evaluation of library impact, as well as for promoting and advocating the value that national libraries provide for their population and for society.

6.2.5.2 Objective of impact assessment

The objectives of impact assessment can be summarized as follows:

a) to support decision making and resource management in the individual library;

b) to justify the resources used for the library's collections and services;

c) to monitor the findings against results of similar organizations;

d) to inform national or regional organizations in their support, funding and monitoring roles;

e) to promote the library's role and importance for their users and for society.

6.2.5.3 Reporting and presenting assessment results

The results should be reported in a way that informs the decision-making processes and demonstrates how the national library fulfils its mission. To gain the full value of the results, adequate methods of representing the data can be essential, aligned with the interests of the different stakeholder groups.

It is useful to illustrate the findings with narrative texts about what has changed due to library impact, such as stories about an increased interest in national history via the national library's online collection of historical sources, or about schools using the national library's teaching resources. Such anecdotal evidence complements the data and makes a more persuasive case for impact assessment results.

6.3 Methods for assessing impact of national libraries

6.3.1 General

In the majority of cases the impact of libraries cannot be captured directly, but surrogate measures have to be used. Evidence of impact can be collected in the following ways (see Reference [77]):

— Impact can be inferred through

  — output data;

  — library performance indicators;

  — user satisfaction levels;

— Impact can be observed (through observation, self-recording, or tests);

— Impact can be solicited (through questionnaires, interviews, focus groups, or other methods for requesting information or opinion).

In many cases, it has proved useful to combine several methods to obtain reliable results, such as to back up statistics that indicate impact with results from interviews or focus groups.

6.3.2 Inferred evidence

6.3.2.1 General

Data that libraries collect regularly for their annual statistics or that they assess via performance measurement and user satisfaction surveys can be used for identifying potential impact. Such cases of inferred impact should be followed up by other methods in order to validate the inference.

6.3.2.2 Statistics indicating impact

An increase or decrease in usage and/or user statistics points to an influence of the library.

Examples of such statistics are:

— number of physical or virtual library visits;

— number of accesses to the national library's online collections;

— number of attendances at events;

— number of newly registered users of the age 13 to 18 (young adults);

— number of subscribers to national library metadata;

— number of researchers booking a user place in the reading rooms.

If usage numbers are increasing, the data seem to indicate that the users have adopted new ideas and practices, such as working inside the national library, using specific online collections, or asking the reference service.

If the percentage of library users in a specified target group is increasing, this indicates that the library's engagement for specified potential user groups has been successful in attracting those groups and changing their behaviour. Users might have experienced benefits when using the library and come again or recommend library use to other persons out of their group.

6.3.2.3 Performance indicators indicating impact

Performance indicators for national libraries are described in Annex A. The indicators evaluate the quality of library services and products, not the effect of these services and products on users and on society. However, high quality shown by specific performance indicators allows the assumption of a positive influence, especially if it is connected to rising usage data.

Examples of such indicators are:

— User places occupancy rate

  (A high rate may point to users benefiting from the working possibilities and resources in the library.)

— Number of attendances per event

  (High attendance, especially at events promoting the library's valuable collections, points to the public becoming aware of the cultural heritage.)

— Willingness to return

  (A high rate points to users having benefited from the library's reference services.)

It should be kept in mind that frequent use of library services is not an impact; the assumption should be corroborated by methods such as surveys or tests.

6.3.2.4 User satisfaction scores indicating impact

Methods for assessing user satisfaction are described in A.2.1.1.

User satisfaction surveys ask for users' one-time or long-term experience with library services or for experience compared to expectation. Though satisfaction in itself is not a direct impact in the sense of this document, it can predispose users for being influenced and can serve as basis for impact in furthering receptivity. High satisfaction rates for specified services of the library can identify library services that may have had an impact on the individual user's skills and competences, behaviour or opinions and on institutional users' time saving or increase in the quality of their output.

EXAMPLES

— High satisfaction with the **reference service** can indicate that users acquired valuable information and/or learnt something.

— High satisfaction with **user training** can indicate that the attendees acquired new skills.

— High satisfaction with the **speed or accuracy** of service delivery can indicate that users have been benefited by saving time and effort in their work.

Such assumptions should be validated by using methods as described in 6.3.4.

6.3.3 Observed evidence

6.3.3.1 General

"Observed evidence" means observation of user behaviour during and after contact with library services. This includes:

— observation, either by researchers or by technical devices, e.g. via video-recording, log analysis or data mining;

— self-recording of users;

— citation analysis: citation of the national library's collections and services in publications;

— tests of changes in the knowledge, competencies and skills of library users.

There may be ethical and privacy issues to be addressed when observing and recording behaviour. Users should not be identified in the records of observation without their permission.

6.3.3.2 Observation

Unlike public or university libraries, national libraries have no specified clientele or primary user group. A considerable part of the users visits the national library with a specific one-time request rather than for long-term work requiring multiple visits. Therefore, it can be difficult to identify changes of skills and behaviour in individuals or groups by observational methods. Possible methods are described in ISO 16439:2014, Clause 8.

6.3.3.3 Self-recording

Better adapted to national libraries is the method of self-recording by users, especially of researchers working in the library or with library resources over a certain time.

Diaries are the usual method for recording the particular services, facilities, or resources that subjects have used and how they felt about this. An assessment can then be made of whether there have been changes in patterns of use or in users' attitudes as a result of a library intervention.

Example of a diary structure for each day (see Reference [42]):

— activity (What were you trying to achieve?);

— resources or services used;

— results obtained (e.g. any problems encountered, relevant articles found);

— next steps (e.g. Do you need more information?).

Self-recording of users is a cost-effective data collection method for assessing library impact.

Disadvantages of self-recording are as follows.

— The analysis of the collected data will usually be work-intensive.

— It can be difficult to recruit users for a continued participation, as they might perceive the recording as involving a significant workload.

— The results might be regarded as less objective than observation by neutral observers.

6.3.3.4 Citation analysis

The collections of national libraries have a high relevance for research, especially the rare or unique items. National libraries also support research by their services. This can be assessed by asking the researchers (see 6.3.4).

A proxy method is the bibliometric analysis of new publications, identifying all publications in which the authors cite the use of the collections or services of a specified national library (see Reference [47]).

6.3.3.5 Tests

Tests can be used for identifying an increase of skills and competences in users after library contact, especially after information literacy and other training.

Tests as method for identifying impact have several advantages.

— They are easy to collect and to analyse and therefore cost-effective.

— There are numerous standardized forms that can be used.

— The response rate is usually high, especially when the test comes after a training programme.

— The results are clear and non-ambiguous.

For national libraries, tests can be useful for assessing the effect of their educational services. National libraries offer learning sessions, learning materials and programmes for children and adults in order to support learning and education.

In order to assess whether changes in knowledge, skills and competencies are due to those educational services, it is important where possible, to conduct pre-tests as well as post-tests to see whether any measurable improvement has taken place, and to test differences statistically to see if they may be regarded as significant.

6.3.4 Solicited evidence

6.3.4.1 General

The main methods for assessing impact of national libraries are those that are grouped under “solicited evidence”.

"Soliciting" evidence of impact means asking for the users’ experience with the library, the benefits they derived from library services and their general opinion of the library. The questions are usually addressed to actual users, but may include non-users.

The methods employ various techniques of questioning users and non-users about their experience and estimation of library benefits. The methods comprise written questioning (surveys) and oral questioning (interviews, focus groups).

All methods mentioned above produce qualitative and quantitative data, but also stories and anecdotes about library impact.

6.3.4.2 Impact surveys

Surveys are the most-used instrument for determining the extent to which direct or long-term library impact is experienced by the users or the general public. Libraries have been familiar with user surveys for decades, mostly enquiring about satisfaction with library services, but also about the types of activities when users physically or virtually visit a library, or about desired new or changed library services.

Impact surveys might ask some of the questions mentioned above, but they add a new dimension: they ask about the effects – especially beneficial effects – of contact with the national library. The impact survey can ask for:

— influences that users experienced individually;

— influences that they think national libraries normally have.

Generally, an impact survey will address actual library users in order to capture their opinion and experience, but if the main point of a survey is to assess the general opinion about a library's value, such as the value of a national library for the cultural heritage of a country, then non-users should be included. Persons who themselves do not use libraries may yet have a clear conception of a library's value for individuals and society.

6.3.4.3 Structure and format of surveys

Written surveys are more or less standardized and predominantly deliver results that are quantifiable. If a large target population has to be questioned, structured and standardized questionnaires should be preferred in order to cope with the quantity of results and to ensure comparability of the answers.

The survey should be pre-tested in a sample of the population for which it is meant.

The questionnaires can be administered in different formats and ways:

a) print questionnaires handed out in or outside the library;

b) print questionnaires sent by mail to all or a sample of registered or potential users;

c) telephone surveys of a sample of registered or potential users (feasible for short questionnaires);

d) online questionnaires sent by electronic mail to all or a sample of registered (or potential) users;

e) online surveys presented on the library's website, often in connection with the use of specified services (online catalogue, electronic journals).

Response rates are highest when the interviewees are personally addressed, i.e. when questionnaires are distributed in person with an explanation of the survey goals and the possibility of interviewees asking questions while completing the survey. The same applies to telephone surveys. In addition, both methods yield much anecdotal information which may also be used for qualitative analysis. The disadvantage of both methods is that the respondents might be influenced by the staff or by the telephone interviewer. These methods also require greater resources in terms of staff time.

Sample sizes should be large enough to ensure a return of at least 100 responses and should be strongly orientated towards the socio-demographic structure of the total population to reach representative results. A minimum of 400 responses is recommended for large populations.

Examples of impact surveys for national libraries are given in Annex B.

6.3.4.4 Interviews and focus groups

6.3.4.4.1 Interviews

Oral questioning is done in the form of interviews that may be conducted individually or with groups, and face-to-face, by telephone, or via the Internet. An interview is normally handled by an interviewer or moderator (for a group interview).

A special form of interview is the "street survey" where a random sample of passers-by is interviewed with a list of generally predetermined questions. Such interviews include non-users and are practical for assessing the general publicity of the national library and common opinion about its tasks and value.

The interactive interview method can address a subject in detail and, in contrast to written questionnaires, provides immediate response to questions. On the other hand, interviews are generally more time-consuming and therefore more expensive than surveys, especially in unstructured interviews where it may be difficult to code the answers. Instead of conducting multiple individual interviews, group interviews can save time.

Interviews with persons who are willing to be approached more than once over a specified time period are called panel interviews. They can be especially useful for identifying library impact that only becomes visible over time.

In terms of questioning patterns, interviews are divided into the following three types:

a) structured interviews (scripted with predetermined questions);

b) unstructured interviews (giving interviewers freedom to explore topics);

c) semi-structured interviews (questions are partially prepared in advance).

6.3.4.4.2 Focus group interviews/discussions

Focus group interviews are group interviews in the form of a discussion among a small number of selected individuals on topics introduced by the moderator. Data are gathered not only from participants' responses but also from the discussion among them.

Virtual focus group interviews can be conducted via computer-mediated discussion. They have both strengths (e.g. easy to convene and gather data) and weaknesses (e.g. difficult to detect deceit and to establish rapport among participants).

The focus group interview needs a moderator (facilitator) and someone taking notes.

Focus group interviews on national library impact can discuss the following as basic topics:

a) the participants' opinion of the general value of national libraries (e.g. the library as keeper of the cultural heritage or as support for learning and research);

b) the benefits that participants experienced when using the national library's services (e.g. new ideas for a research project).

The first topic – assumed value of libraries – may include direct and indirect, short and long-term potential benefits. Non-users' opinions can be interesting here. The second topic should be mainly discussed by actual users (or former users) and focuses on the participants' own experiences (which might include non-beneficial impact).

Example of a series of questions (topic: general value of the national library):

a) How do you see the educational role of the library?

b) Do you think that the national library can influence the economics in your country?

c) Can you suggest how the national library could support social inclusion?

6.3.5 Combined methods

The use of several methods in combination, collecting and analysing data of different types and origin, can provide a richer more nuanced set of findings that may lead to better insights, understanding and identification of library impact and also to greater confidence in the conclusions generated by the evaluation study.

Combining methods can include using both qualitative and quantitative data or employing multiple methods to work with either one of those. Qualitative methods add texture and meaning to the quantitative data and help identify library impacts.

Examples for combined methods:

— Gain of competencies by attendants of the national library's educational sessions

  Methods used: tests, interviews, and self-recording

— Time saved by libraries using the national library's metadata

  Methods used: statistics of libraries using the metadata, questionnaire

6.4 Assessing the economic value of national libraries

6.4.1 General

Libraries can calculate the value of their services in monetary terms and assess how the library interacts in a larger economic environment. This is especially important if libraries need arguments for accounting for library budgets.

Assessing the economic value of libraries can have two different meanings.

a) The monetary value of libraries, i.e. the value of library benefits expressed in monetary terms

   The benefits produced by library services are calculated in monetary terms; the result may be compared with the library's investment into these services.

b) The economic impact of libraries

   Another option is to identify a direct or indirect positive influence of libraries on the economic life of the community, the region or even on the national economy.

6.4.2 Calculating the value of library benefits to users

6.4.2.1 General

The economic value of national library benefits can be established in different ways:

a) by calculating costs if a similar or related service is available in the market (replacement costs);

b) by calculating time costs: Monetary values can be calculated from the time spent on library services and the salaries (or average salary) of users;

c) by soliciting user estimates: Users (and non-users) estimate the monetary value of a library or a library service (e.g. a loan) for themselves or for society. This may be achieved by simple estimates, e.g. the value of one loan, or methods such as contingent valuation.

6.4.2.2 Calculating replacement costs for library services

Replacement or substitute costs for library services are calculated based on the costs incurred if users are forced to use alternatives. The method assumes that the costs of substituting services provide useful estimates of the value of library services.

The simplest way for calculating a monetary value for a specified library service is to ascertain the current market value of the service, i.e. the current price at which the service can be bought or sold in the free market. Only some library services or products are offered in the free market, however.

Examples for replacement costs:

— copies made by copying services;

— purchase of cataloguing data from publishers or other institutions;

— digitizing by commercial firms.

For the use of electronic journal articles, a monetary value can be calculated as cost per use. The cost of journal subscriptions is divided by the number of article downloads to arrive at a cost per use figure that can be compared with the costs of obtaining a similar number of articles from a commercial supplier.

The use of a library service does not, as a matter of course, show a direct benefit or outcome for the user. Establishing a market or surrogate price for a loan does not show whether the user profited from the loan.

6.4.2.3 Calculating time costs

The premise of this method is that the value that users place on the benefits they receive from library services is probably at least as great as the value of time and effort that they expend when accessing and using those services. The time and effort include the following:

— travelling costs;

— costs of the time spent on actually using library services.

This method has not yet been used in national libraries.

As a variation of this method, the time saved by using library services can be assessed and calculated in monetary terms. Again, users are asked to state their time saving by one-time or long-term library contacts and to rate their respective salaries in a predetermined list.

EXAMPLE Publisher N uses the national library's cataloguing in print and thus saves cataloguing staff. For the book production of one year, time saving comes up to 12 000 €.

6.4.2.4 User estimates of economic value

6.4.2.4.1 General

The methods described above for identifying the monetary value of library services are not adapted for assessing the financial value of library benefits as experienced by users. Use of solicited evidence is therefore recommended, namely user estimates of the financial value of the services they use and/or the benefits that they experience.

Trying to assess an economic value of library benefits by way of surveying users is a complex procedure. While the end result is numeric, the methodology focuses on the subjective estimates of individual users.

6.4.2.4.2 Estimating a monetary value for specified services

Users are asked to place a monetary estimate on their experience with a specified library service. This method has been mainly used for book loans in public libraries, but can be extended to other clearly definable services such as reference transactions, or an educational session.

As using a library service does not necessarily lead to an impact on the user, it is important to ascertain whether the user has experienced a benefit before asking for an estimate of an economic value.

EXAMPLE After a transaction with the reference service of a national library, users were asked whether the answer had been useful for them. Those that answered positively were then asked to place a monetary value on the information received. The question was what price they would have paid to get the reference answer had this been required. The average estimate of value was 2 € per answer.

The financial situation of the respondent can influence the estimate of a value and should be considered.

6.4.2.4.3 Contingent valuation

Contingent valuation is an economic method used to estimate the benefits of a non-priced good or service by examining the implication of not having the product or service. Contingent valuation generally uses a survey-based method developed to assess the financial value of non-profit organizations and services, especially projects in health care, environmental protection, education or culture. Contingent valuation is probably the most frequently used method for the monetary valuation of library benefits.

Persons directly or potentially interested in the library's services are asked to rate the value in monetary terms. The monetary estimate is solicited by the following questions:

— willingness-to-pay: What would you pay for maintaining this library/this special library service?

— willingness-to-accept: Which sum would you accept as a compensation if this library/this special library service were given up?

Usually, the surveys ask for payment or acceptance of money expressed by higher or lower taxes. Respondents are given options between sums they would pay or accept.

The contingent valuation method is applicable for considering use-values as well as non-use values. Non-use values include the following:

a) option value: the value that a non-user places on having the option to use the library at a later point of time;

b) existence value: the value of knowing that the library exists even though the respondent does not intend to use it;

c) bequest value: the value of preserving the cultural heritage for future generations;

d) altruistic value: the value that a non-user places on libraries as institutions for recreation and learning for other people, such as for children or researchers.

The problem of contingent valuation is that respondents are asked to put a monetary value on services or institutions that they usually do not consider from an economic point of view. Generally, the values estimated by willingness-to-accept are higher than those estimated by willingness-to-pay and are seen as less reliable.

Contingent valuation has been most often used in public libraries (see References [12] and [46]). The best-known example of contingent valuation in libraries is that of the British Library (see References [72] and [78]). Contingent valuation has also been used in academic libraries to determine the value of periodical collections to users (see Reference [13]).

EXAMPLE 1 of questions (see Reference [79]):

— Willingness to accept: If public funding for this library ceased, what should the government pay to you as compensation?

— Willingness to pay: If public funding for this library ceased, how much would you be willing to pay in order to guarantee the survival of the library?

— Price elasticity of demand: In what way would your use of this library change, if prices went up by 50 %?

— Investment in access: How much would your work be impaired, if this library did not exist anymore? What additional time would it cost you?

— Cost of alternatives: What additional costs (not staff costs) would you have per year, if you would have to use alternatives for this library?

EXAMPLE 2 of questions (see Reference [13]):

Question: Where would you obtain the journal article if it were not available through the library?

— I would not bother getting the information.

— I would obtain the information from another source (please specify source).

Those who would use an alternate source to the library are asked this follow-up question:

— In order to obtain the same information, I would expect to spend… minutes of time and/or $.

6.4.3 Economic impact analysis

Economic impact analysis identifies the direct and also the indirect (multiplier) effects of library expenditure on economies, especially on the local economy. The library can be seen as a local employer and a purchaser of local goods and services or as attracting tourists and visitors.

a) Local impact: Libraries support the local or regional economy by

- — regularly buying media and materials for their tasks;
- — placing orders for binding, conservation and preservation (microfilming, copying, digitization);
- — spending funds on utility management (e.g. heat, light, water, sewage, or cleaning);
- — providing employment to a number of persons;
- — supporting retail stores or accommodation facilities in their surroundings by their users.

b) Influence on the regional or national economy:

National libraries can positively influence the academic or professional success of their users. Higher information literacy in the population, quick and good qualifications can in their part have an impact not only on the local and regional, but even on the national economy.

6.5 Assessing impact on a specified target population

6.5.1 General

National libraries have no defined clientele, but offer most of their services to all interested persons and groups. Their users can, however, be differentiated into certain target groups that would be influenced in different ways by the contact with the national library's services (see 4.2).

6.5.2 Assessing impact on researchers

6.5.2.1 General

National libraries play a major role as cultural memory institutions, not only by the systematic collection of the national imprint, but often also by their considerable holdings of rare materials, such as manuscripts, incunabula and rare books. The research based on these collections constitutes an important contribution to the national and international cultural history.

Generally, national libraries place their collections at the disposal of researchers with no limitations, provided that there are no legal or conservational concerns.

National libraries document and describe their specific collections in the most scholarly way. Beyond that, they often carry out scholarly work on collection objects, for example, scholarly editing.

National libraries support and collaborate in research projects and present the results of research on their collections to the public in the form of publications, databases, and exhibitions, preferably in digital format.

6.5.2.2 Impact on researchers

Researchers are here defined as persons doing research for academic, commercial or personal reasons; this includes future research.

All aspects named in 6.5.2.1 are valuable for researchers. The main advantages are the following.

- — Researchers can be secure that even rare titles from the national imprint are available and accessible in the national library.

— In many cases, they find special collections for their specific research subjects.

— Working in the library offers options for contact and communication with other researchers with the same topic.

— Researchers can make use of the broad knowledge about the collections that library specialists have built up.

— The quiet atmosphere in the reading-rooms supports concentrated research.

— The library's activities in promoting its holdings can initiate and support research projects.

The impact on researchers can consist of:

— time saved by using the library's comprehensive collections and information services;

— essential information gained that could be found nowhere else;

— higher success in research projects and publications;

— more contacts with the national and international research community.

6.5.2.3 Methods for assessing impact on researchers

Statistics of library use can indicate impact.

EXAMPLE 1

— number of researchers booking a user place in the reading rooms;

— number of research projects where the national library cooperates.

Results of performance indicators can point to impact.

EXAMPLE 2 Willingness to return (to the reference service).

The influence of the national library's collections on research can be assessed by a bibliometric analysis of new publications, identifying all publications in which the authors cite the use of the collections or services of a specific national library.

The most effective way for assessing impact on researchers is to question them, either in direct interview, in discussion groups or by survey. It has proved practical to combine questions as to:

— the respondents' activities when using the library's services (onsite or remote);

— their satisfaction with the library's services;

— possible benefits received.

An example of a survey for researchers is shown in Annex B.

6.5.3 Assessing impact on educators and learners

6.5.3.1 General

National libraries play a key role for the participation of all people in education and life-long learning. They enhance learning and knowledge creation and further the understanding of the national history, culture and society.

National libraries provide learning sessions, learning materials and educational programmes for children and adults, usually in digital form. These educational services are generally based on the comprehensive national collections.

National libraries join in national programmes for promoting literacy and digital literacy.

National libraries offer educational services for teachers and schools and cooperate with other libraries in the country in preparing and offering such services.

6.5.3.2 Impact on educators and learners

Educators and learners are here defined as all persons engaged in teaching and/or learning, from schoolchildren to teachers and lifelong learners.

All aspects named in 6.5.3.1 can impact teachers and learners.

Individual learners, whether children or adults, can experience the following (see 6.2.3.2):

— changes in skills and competences;

— changes in attitudes and information behaviour;

— higher success in school, study, or career;

— better understanding of and identification with the national culture;

— individual well-being.

Impact on teachers and educators can consist of:

— time saved by using the programmes prepared by the library and the expertise of the library's staff;

— higher effectiveness in teaching;

— options for contact and communication with other teachers using the same programmes.

6.5.3.3 Methods for assessing impact on educators and learners

Statistics of library use can indicate impact:

— number of teachers booking learning sessions for their school classes;

— number of accesses to online learning materials of the library.

Impact on individual persons as described in 6.5.3.2 can be identified:

— by tests before and after using learning materials or attending learning sessions of the library (see 6.3.3.5);

— by self-recording when using learning materials (see 6.3.3.3);

— by questioning the onsite or remote attendants of learning sessions or programmes after the event (by interview or questionnaire);

— by questioning the users of digital learning materials when leaving the website (by questionnaire).

Impact on teachers/educators can be identified by surveys and interviews asking for:

— the gain in information and teaching skills by making use of the library's programmes and materials and the staff's competence;

— time saved by making use of the library's programmes and materials;

— skills and information gained by contacts with other teachers using the same programmes and materials.

6.5.4 Assessing impact on the general public

6.5.4.1 General

The existence of a national library, its collections and its services can influence the general public, i.e. the cultural, political and social life in the country.

The general public is defined here as:

a) the population in the country (and beyond) as a whole;

b) every individual that does not correspond to the other groups in 6.5.

6.5.4.2 Impact on the general public

Individual persons that are influenced by contact with national libraries will usually be researchers (see 6.5.2) or educators or learners (see 6.5.3). Other persons can be visitors of exhibitions and other events, or library visitors with an interest in the rare collections or the architecture. Impact of such library visits, which would include visits to online events, can be:

— enjoyment, well-being;

— increase of knowledge, new ideas;

— changes in attitudes, for example, concerning the value of the national cultural heritage.

The impact of national libraries is less perceptible in individual cases than as a general influence. The public, even if they have only a general idea of a national library and no personal experience, will usually name the following potential benefits.

— National libraries serve as symbols for the national culture and further national identity.

— By collecting and preserving the national documentary heritage, national libraries guarantee that future generations will also have permanent access.

— By giving general access to their national collections, national libraries support equal access to information.

— By promoting their collections in exhibitions and events and on Internet platforms, national libraries support educational activities for children and adults.

6.5.4.3 Methods for assessing impact on the general public

Impact on individual persons as described in 6.5.4.2 can be identified:

— by questioning the users when leaving the physical library and/or event (by interview or questionnaire);

— by an online questionnaire offered when the user quits the online event.

Impact on the general public, i.e. the cultural, political and social life in the country, can also best be assessed by the methods described in 6.3.4: surveys, interviews and group discussions. In order to identify this impact, the questioning should include non-users who may have distinct views about the value of a national library.

Questions to be asked could be:

— whether the interviewees know the national library in their country;

— what functions and services they associate with the national library;

— what groups out of the population they suppose are national library users;

— what influences they think national libraries normally have (currently and in future).

An efficient way of catching the public opinion about national libraries is the “street survey”, where a random sample of passers-by is interviewed with a list of generally predetermined questions.

6.5.5 Assessing impact on the library and information network

6.5.5.1 General

Most national libraries play a major role in the library and information network of their country, often also beyond their county. The weight and importance of national libraries in this context are influenced by the library and information policy in the country and by the structure and resources of the library landscape in the country.

The role of the national library in the library and information network will generally have the following aspects.

— Due to their collections, national libraries are often the last resort for documents, especially for publications in the national imprint.

— National libraries support librarians by providing information based on their huge national and international collections.

— National libraries are usually the principal agents promoting national and international cooperation of the library network and with institutions such as museums and archives.

— National libraries are often responsible for managing central library services, e.g. resource sharing systems, interlibrary loan, central catalogues, a digitization centre, a national digital library, a centre for library education, or a centre for international standard numbers.

— National libraries join in the development of methods and standards for the description and preservation of the national documentary heritage.

In countries where resources in libraries are scarce, national libraries sometimes support the services of other libraries, especially of public libraries.

6.5.5.2 Impact on the library and information network

All aspects named in 6.5.5.1 can impact other libraries or information-focused organizations. The main features of such impact are as follows.

— Reliance on the national imprint being collected and permanently accessible can save effort and storage space.

— Using the national library’ s cataloguing records will not only save labour costs, but guarantee quality and consistency of catalogues and databases.

— Time and costs can also be saved by using the national library’s information services.

— Central services managed or co-managed by the national library can support other libraries in various tasks.

— New methods and techniques that are developed or co-developed by national libraries, such as new cataloguing rules or long-term preservation techniques can further the organizational or technical development in the national network and in individual libraries.

6.5.5.3 Methods for assessing impact on the library and information network

Usage and user statistics can indicate that the national library’s services benefit the library and information network.

Examples of such statistics are:

— number of libraries and/or other institutions using the national library's metadata;

— retention of customers buying services from the national library;

— number of information professionals attending training sessions offered by the national library.

Some performance indicators can help to identify an impact of the national library.

Examples of such indicators are:

— Willingness to return (see A.2.3.3): Do librarians repeatedly use the national library's reference service?

— Usage of foreign publications acquired during the last 3 years (see A.1.1.3): Does the national library's foreign collection correspond to the needs in the country?

The most effective methods are those described in 6.3.4 Solicited evidence, namely interviews, focus groups and surveys.

Questions in interviews, focus groups and surveys could ask for:

— direct impact of national library services on cataloguing quality and speed of cataloguing;

— time saved by using the services of the national library;

— costs saved by using the services of the national library;

— storage space saved by relying on the national library collecting the national imprint;

— the value of the national library's foreign collection for the individual library's clientele;

— changes in individual libraries by using methods and instruments developed by the national library.

Surveys, interviews and discussions could also be used for assessing the feeling of reliance and security by the existence of the national library and its mission of preserving the national documentary heritage.

A combination of questions asking for satisfaction with the national library's services and for actual or potential benefits might be most effective.

6.5.6 Assessing impact on publishers and authors

6.5.6.1 General

National libraries cooperate with the publishers in their country in collecting the national documentary heritage. The delivery of one or more copies of all print materials published in the country to the national library – called legal deposit – is generally regulated by law or legal regulations. Other materials such as photographs and audio-visual documents can be included. Today, legal deposit often also covers preprints of editions, material published digitally and/or online such as websites, blogs, eBooks and electronic journals.

6.5.6.2 Impact on publishers and authors

Publishers are generally obliged to deliver their publications free of charge to the national library. On the other side, they benefit in various ways from the legal deposit system:

— The national library engages to catalogue the deposited publications and to record them in the online catalogues and the national bibliography, where they are searchable for everybody.

— The national library undertakes the long-term preservation of the publications as part of the national heritage. Thus, the publishers might dispense with an archive of their own.

— The national library often organizes the ISBN, ISMN and ISSN systems that publishers can use.

— By establishing statistics of the media production in the country, the national library can give an overview of the yearly national imprint.

The impact on publishers by national library services concentrates on these issues:

— a saving in time by using the national library's metadata and information sources;

— a saving in costs by using the national library's metadata and information sources;

— the reliance on the national imprint being collected, catalogued and preserved;

— the influence of standardized metadata on the quality of the records;

— the inclusion of the records in the national bibliography, making the publications searchable;

— the promotion of the deposited publications by author readings, exhibitions, etc.

Authors have the additional benefit that the national library pays attention to author rights and often offers support for authors in this question.

6.5.6.3 Methods for assessing impact on publishers and authors

For assessing the time saved by using the services of the national library, publishers could be asked to calculate or estimate the time their staff would need for producing catalogue records for the publishing production.

For identifying the costs saved by publishers by using the services of the national library, replacement costs could be assessed (e.g. the publisher buying cataloguing data elsewhere or renting buildings for the archive), or the costs of staff time saved could be calculated.

Surveys and interviews could ask for the direct benefits by the national library in cataloguing quality and speed of cataloguing.

Surveys and interviews could also be used for assessing the feeling of reliance and security by the existence of the national library and its mission of preserving the national documentary heritage.

A combination of questions asking for satisfaction with the national library's services and for actual or potential benefits might be most effective.

6.5.7 Assessing impact on public administration

6.5.7.1 General

National libraries often provide services to the legislative, executive and judicial branches of government. In some cases, they even combine the functions of national and parliamentary library.

Services for governmental institutions can include the following.

— The national library's comprehensive national collections are the primary information resource on all national policy issues.

— The library supplies items from its collections by lending, copying and digitizing services.

— The library offers a wide range of research services and supplies relevant information worldwide.

— The library helps in analysing and evaluating information.

Additional tasks might be taken over by the national library if there are no special parliamentary or governmental libraries in the country.

6.5.7.2 Impact on public administration

Public administration is here defined as all institutions belonging to the legislative, executive and judicial branches of government.

All services named in 6.5.7.1 can impact the work of these administrative units. The main aspects of such impact are as follows.

— The awareness that the national imprint is searchable and reclaimable in the national library gives security in information seeking.

— Time and costs can be saved by using the national library's research and supply services.

— The library helps to gain increased knowledge about national policy issues.

— Governmental institutions can make use of the broad knowledge about the collections that library specialists have built up.

6.5.7.3 Methods for assessing impact on public administration

Usage and user statistics can indicate that institutions of public administration have benefited from the national library's services.

Examples of such statistics are:

— number of members of these institutions using the national library's reference services;

— number of loans by institutions of public administration.

Some performance indicators can also help to identify an impact of the national library.

An example of an indicator is as follows:

— Willingness to return (see A.2.3.3): Do users from institutions of public administration repeatedly use the national library's reference service?

The most effective methods are those described in 6.3.4 Solicited evidence, namely interviews, focus groups and surveys.

Questions in interviews, focus groups and surveys could ask for:

— the value of the library's national collections for handling national policy issues;

— the gain in information by making use of the library's support services;

— time saved by using the library's services;

— costs saved by using the library's services.

A combination of questions asking for satisfaction with the national library's services and for actual or potential benefits might be most effective.

6.5.8 Assessing impact on business

6.5.8.1 General

National libraries can influence the local, regional or national economy by supporting business in starting up and growing new enterprises. This is especially effective for small- and medium-sized enterprises.

The national library's expertise and collections can give help during the development of a business idea, in the start-up phase, and during the further development. The main areas for such support are:

— market research and competitor analysis;

— legal aspects;

— tax regulations;

— drawing up of a business plan;

— finding possible sources of finance;

— use of social media for the business;

— digital marketing;

— protection of trademarks and intellectual property;

— tips for presenting business ideas.

The library offers reliable and relevant information for these issues, e.g.:

— business directories;

— databases on a wide range of topics, including law, health and business administration;

— government publications containing information relevant to business and industry.

Information and support by the library can be delivered via one-to-one advice sessions, learning sessions, workshops and webinars.

6.5.8.2 Impact on business

All aspects named in 6.5.8.1 can impact business start-up and development. The main features of such impact are:

— time and costs saved by using the national library's support services;

— new ideas for business start-up and innovation;

— increased knowledge about the regional and national market;

— information gained that could be found nowhere else;

— higher financial success.

6.5.8.3 Methods for assessing impact on business

Usage and user statistics can indicate that business people have benefited from the national library's services.

EXAMPLES of such statistics are:

— number of persons using the national library's business support;

— number of persons attending onsite and/or online training on business topics offered by the national library.

Some performance indicators can also help to identify an impact of the national library.

EXAMPLE of an indicator:

— Willingness to return (see A.2.3.3): Do business people repeatedly use the national library's reference service?

Impact on individual persons can be identified:

— by questioning users when leaving a one-to-one advice session;

— by questioning the onsite or remote attendants of learning sessions or programmes after the event (by interview or questionnaire);

— by questioning the users of digital learning materials when leaving the website (by questionnaire);

— by tests before and after using learning materials or attending learning sessions of the library (see 6.3.3.5);

Groups of business people can also be interrogated in focus or discussion groups.

Questions in interviews, focus groups and surveys could ask for:

— new ideas, better knowledge of the market options for the specific business;

— the gain in information and searching skills by making use of the library's programmes and materials and the staff's competence;

— time saved by using the services of the national library;

— costs saved by using the services of the national library (see 6.4.2).

A combination of questions asking for satisfaction with the national library's services and for actual or potential benefits might be most effective.

Annex A
(normative)

Description of performance indicators

A.1 Collection

A.1.1 Collection building

A.1.1.1 Percentage of national publications acquired by the national library

A.1.1.1.1 Background

One of the main tasks of a national library is to collect the national production of publications in conventional or electronic format. This may include cartographic and music documents, pictures, photographs and audio-visual documents.

In most cases, this is realized via legal deposit, although legislation in the countries differs as to the coverage of materials and formats and the methods used to ensure the acquisition. National libraries have also started collecting websites (archiving the web) by harvesting techniques.

A.1.1.1.2 Objective of the performance indicator

This performance indicator assesses to what degree the library covers the national production.

The indicator shows whether the library has an adequate awareness of and access to commercial and non-commercial institutions producing documents and whether its claiming procedures are effective.

A.1.1.1.3 Definition of the performance indicator

This performance indicator is the percentage of the national imprint in all possible formats that has been acquired by the national library and that is accessible through the national library's online catalogues, including the national bibliography.

The national imprint is defined as all documents of all formats published in the country.

NOTE 1 The definition includes commercial and non-commercial publications.

NOTE 2 Websites are excluded.

NOTE 3 Preprint files can be included.

NOTE 4 Publications that do not fall within the collecting criteria of the library (e.g. posters or exhibition programmes) are excluded.

A.1.1.1.4 Methods

A.1.1.1.4.1 General

It is preferable to calculate the indicator separately for commercial and non-commercial publications, and within those two categories to calculate it for each type of document and each format separately.

Non-commercial publications may be subdivided into government and private publications such as those published by associations, organizations, and companies or by self-publishing.

The calculation should focus on a particular year of publication (e.g. coverage of publications published in year XXXX), and the evaluation should be conducted up to three years after that publication year.

A.1.1.1.4.2 To assess the coverage of commercial publications

Count the number of publications of any given year listed in all publishers' catalogues or in a central publishers' database. Count the total number of these, acquired by the national library.

If that is not feasible, a random sample of publishers' catalogues may be taken.

The percentage of national publications acquired by the national library is calculated as shown in Formula (A.1):

$$\frac{A}{B}\times 100 \tag{A.1}$$

where

A is the number of titles published in any given year as listed in publishers' catalogues or a publishers' database, that have been acquired by the library;

B is the total number of titles published in any given year and listed in the publishers' catalogues or database.

Round off to one decimal place.

A.1.1.1.4.3 To assess the coverage of non-commercial publications

Count the number of titles in a representative sample of catalogues and bibliographies (e.g. catalogues of official publications per organization, catalogues of different commercial and non-commercial organizations, regional bibliographies) of any given year. Count the number of these that have been acquired by the national library.

Calculate the percentage of national publications acquired by the national library as shown in Formula (A.2):

$$\frac{A}{B}\times 100 \tag{A.2}$$

where

A is the number of titles in the sample that have been acquired by the library;

B is the total number of titles in the sample.

A.1.1.1.4.4 To assess the coverage of both commercial publications and non-commercial publications

Count the number of titles in a random sample of commercial publications (publications with an ISBN/ISSN) and non-commercial publications (publications without an ISBN/ISSN) listed in the national union/virtual catalogue and published in any given year.

Count the number of these that have been acquired by the national library.

Calculate the percentage of national publications acquired by the national library as shown in Formula (A.3):

$$\frac{A}{B}\times 100 \tag{A.3}$$

where

A is the number of titles in the sample that have been acquired by the national library;

B is the total number of titles in the sample.

Round off to one decimal place.

Commercial and non-commercial publications should be evaluated separately.

NOTE 1 This method is less time-consuming, but results are less accurate than in Formula (A.1) and Formula (A.2).

NOTE 3 Non-commercial publications are presumably underrepresented in the catalogue.

A.1.1.1.5 Interpretation and use of results

The results concerning commercial publications are reliable as far as publishers' catalogues or a joint publishers' database exist. The results concerning non-commercial publications are reliable per organization if complete and recent catalogues exist. Sources like regional bibliographies have varying degrees of reliability, depending on the method of compilation. Results from using the national union/ virtual catalogue as the source for list checking also depend on the comprehensiveness and metadata quality of the catalogue.

If the results show a low coverage of the national imprint, actions to be taken could be:

— to build and maintain a current database of contacts to publishing institutions;

— to promote the library's task of collecting the national imprint;

— to raise awareness among publishers of the importance of legal deposit;

— to improve methods for delivering materials by publishers.

The existence of regional libraries in the country that collect the regional imprint can affect the indicator. The national library should be in close contact with such libraries.

A.1.1.1.6 Source

See Reference [83].

A.1.1.1.7 Examples and further reading

The National Library of the Netherlands collects commercial and non-commercial publications of the national imprint, delivered on a voluntary basis.

In 2005, the coverage of the deposit collection was examined separately for books with an ISBN, books without an ISBN and current periodicals (see Reference [83]). A random sample of titles published in 2003 was checked in the first half of 2005. For books with an ISBN, the Dutch ISBN database was used as bibliographic source. The coverage was 95 %. For books without an ISBN, mostly "grey" literature, the Pica database was used. This database holds the records of many academic, special and large public libraries in the Netherlands. The coverage was 70 %. For periodicals, the sources used were a handbook of periodicals in the Netherlands and again the Pica database. The coverage was 94 % and 84 %, respectively.

The Swiss National Library used the indicator in its 2012 study on the coverage of the acquisition of printed monographs published in Switzerland in 2010 (see Reference [54]). The study used the list checking method developed at the Koninklijke Bibliotheek[83] to evaluate the results of the list produced by Swissbib, the Swiss union catalogue. The study found that the rate of coverage for commercial publications (with an ISBN) was 94,9 % (revised) and that for non-commercial publications or grey literature (without an ISBN) was 88,2 % (revised).

The National Diet Library of Japan assessed their coverage of national publications published during the year 2014. They counted government and private publications separately. The results are as follows (see Reference [57]):

— Government publications (national) 99 %;

— Government publications (local governments) 88 %;

— Private publications (books) 99 %;

— Private publications (periodicals) 88 %.

The Austrian National Library evaluates its coverage of commercial publications by taking a sample of 26 publishers from 198 publishers of the sector arts and culture. The titles of these publishers are checked in the catalogue of the Austrian National Library. The result for 2015 was coverage of 97,7 % (see Reference [58]).

A study was conducted in Pakistan using the published catalogues of a sample of 200 publishers (see Reference [49]). The list checking method was used to compare the publications listed in the selected publishers' catalogues and the ones deposited at the National Library of Pakistan during a period of four years (2010 to 2013). The results revealed legal deposit compliance in the four years of between 11 % to 30 %.

A.1.1.2 Percentage of required national imprint titles in the collection

A.1.1.2.1 Background

The main task of national libraries is to collect the national imprint, in most cases via legal deposit. The national imprint includes publications in all formats, commercial and non-commercial publications. The collection policies of national libraries differ as to the inclusion of ephemera or web publications. The policy is in most cases regulated by legal statutes.

The collection of the national imprint should be as far as possible comprehensive, if the collection policy does not exclude certain materials. In all probability, its spread of titles will therefore be more than the sum of all other library collections in the country, as it can include national materials that no other library collects.

A.1.1.2.2 Objective of the performance indicator

This performance indicator assesses to what extent national imprint titles in demand by users are owned by the library.

Comparisons between national libraries may be possible, if similar collection policies are followed.

A.1.1.2.3 Definition of the performance indicator

This performance indicator is the percentage of national imprint titles required by at least one user that has been acquired by the national library.

NOTE 1 The national imprint is defined as all documents of all formats published in the country, except websites.

NOTE 2 Titles can, for the purpose of this indicator, include individual articles in journals or books, if they are included in the total number of titles as well. What is included has to be stated explicitly in each case.

NOTE 3 User requests of a title include loan, onsite loan, interlibrary loan and document delivery requests by individual users or other libraries.

This performance indicator yields less correct results than indicator A.1.1.1, but it is simpler to use and, as an estimate, may be sufficient.

A.1.1.2.4 Method

Draw a random sample at different times of national imprint titles required by at least one user.

Record for each title in the sample whether the library owns a copy of that title.

Calculate the percentage of required national imprint titles in the collection as shown in Formula (A.4):

$$\frac{A}{B}\times 100 \tag{A.4}$$

where

A is the number of required titles in the sample owned by the national library;

B is the total number of required titles in the sample.

Round off to one decimal place.

It is useful to evaluate commercial and non-commercial publications separately.

For those two categories, it can also be useful to evaluate each type of document and each format separately.

A.1.1.2.5 Interpretation and use of results

The indicator is an integer between 0 and 100. It estimates the probability that a title required by a user is in the library's collection.

A high score indicates that the library fulfils its task of collecting the national imprint in a comprehensive way.

A low score indicates an inadequate coverage of the national production by the national library.

Actions to be taken could be:

— to evaluate incoming user requests and try to acquire missing items;

— to build and maintain a current database of contacts to publishing institutions;

— to promote the library's task of collecting the national imprint.

The existence of regional libraries in the country that collect the regional imprint can affect the indicator. The national library should be in close contact with such libraries.

A.1.1.2.6 Source

See ISO 11620:2014, B.1.1.2[5].

A.1.1.2.7 Examples and further reading

The German National Library tested this indicator for 2 weeks in March 2017. Of 101 requests, 59 concerned national imprint titles, of which 48 = 81,3 % were owned by the library[1)]. Such data should be validated by repeating the test at different times of the year.

1) Not published.

A.1.1.3 Usage of foreign publications acquired during the last 3 years

A.1.1.3.1 Background

The main task of national libraries is to collect the national imprint, in most cases via legal deposit. The national collection usually also includes literature in the national language(s) published outside the country and foreign literature related to the country.

Many national libraries also develop encyclopaedic or specific subject collections without taking into account the country of origin. As the collection of foreign publications is selected deliberately to meet the needs of the library's users, the usage of that collection shows the adequacy of the library's collection policies.

A.1.1.3.2 Objective of the performance indicator

This performance indicator assesses the extent of the demand for new documents in the foreign publications collection.

The indicator can also be used to assess the fit of the foreign collection to the requirements of the library's users.

A.1.1.3.3 Definition of the performance indicator

This performance indicator is the total number of loans + interlibrary loans + electronic document delivery transactions during the reporting year from the foreign publications acquired during the last three years, divided by the total number of foreign publications acquired during the last three years.

NOTE 1 Electronic resources are excluded.

NOTE 2 Onsite loans are included.

A.1.1.3.4 Methods

A.1.1.3.4.1 Count the number of loans + interlibrary loans + electronic document delivery transactions registered during a year from the foreign publications acquired during the last 3 years (including the reporting year). Establish the total number of foreign publications acquired during the last 3 years.

The usage of foreign publications acquired during the last 3 years is calculated as shown in Formula (A.5):

$$\frac{A}{B} \times 100 \tag{A.5}$$

where

- A is the total number of loans + interlibrary loans + electronic document delivery transactions registered during a year for foreign publications acquired during the last 3 years;
- B is the total number of foreign publications acquired during the last 3 years.

Round off to one decimal place.

A.1.1.3.4.2 Take a sample of foreign documents acquired during the last three years. Establish the number of loans + interlibrary loans + electronic document delivery transactions from those documents.

The usage of foreign publications acquired during the last 3 years is calculated as shown in Formula (A.6):

$$\frac{A}{B}\times 100 \tag{A.6}$$

where

A is the total number of loans + interlibrary loans + document delivery transactions registered during a year for the publication in the sample;

B is the total number of publications in the sample.

Round off to one decimal place.

A.1.1.3.5 Interpretation and use of results

A high score is considered as good. It shows the effectiveness of the library's collection policy for foreign publications.

If the usage of foreign publications is low, the following actions might be taken:

— promoting the foreign publications collection;

— evaluating user requests;

— assessing user needs by surveys of individual users or other libraries.

The indicator is likely to be influenced by extensive collections of foreign publications in other libraries of the country.

A.1.1.3.6 Source

See ISO/TR 28118:2009, A.4.1[11].

A.1.1.3.7 Examples and further reading

The National Library of Finland acquired 42 211 foreign publications during the years 2005 to 2007. There were 14 338 loans registered for these documents during the same period. The indicator would be 34,0 %[2)].

The National Library of Sweden acquired 18 320 foreign publications during the years 2014 to 2016. During the same time, there were 7 920 loans and interlibrary loans of foreign documents published between 2014 and 2016. The indicator would be 43,2 %[2)].

A.1.2 Cataloguing

A.1.2.1 Coverage of the national imprint in the new entries of the national bibliography

A.1.2.1.1 Background

Most national libraries publish the cataloguing data of the national imprint in the national bibliography. It is important for access to the national imprint that new publications are acquired and catalogued as soon as possible. Therefore, speed is generally seen as an important criterion of the quality of national bibliographies.

2) Not published.

A.1.2.1.2 Objective of the performance indicator

This indicator assesses the library's speed of acquisition and cataloguing and, therewith, the efficiency of its processes.

The performance indicator does not measure the quality of the cataloguing data.

A.1.2.1.3 Definition of the performance indicator

The indicator is the percentage of new entries in the national bibliography that refer to publications published during the last two years.

The performance indicator may be calculated separately for different types or categories of material.

A.1.2.1.4 Method

For one year, count the number of entries appearing in the national bibliography which were published during that year and the preceding year.

EXAMPLE For entries in the national bibliography of 2015, the number of publications that were published in 2014 and 2015 are counted.

If it is not possible to collect the data via the automated system, a random sample should be taken.

The coverage of the national imprint in the new entries of the national bibliography is equal to Formula (A.7):

$$\frac{A}{B}\times 100 \quad (A.7)$$

where

A is the number of new entries for publications of the last 2 years;

B is the total number of new entries in the national bibliography during one year.

Round off to the nearest integer.

A.1.2.1.5 Interpretation and use of results

The performance indicator is an integer between 0 and 100.

A high score would be seen as good. It means that the national library's acquisition and cataloguing processes are efficient.

A low percentage could have a variety of causes:

— insufficient claiming procedures;

— late awareness of new publications, especially of non-commercial publications;

— backlogs in cataloguing;

— time delays between cataloguing and insertion of titles into the bibliography.

In the case of low scores, the library should investigate whether its acquisition or cataloguing procedures are at fault. If acquisition seems too slow, the library could try to increase the number and type of sources for the acquisition and to improve its relations with publishers. If cataloguing seems too slow, the library should review the workflow for cataloguing.

It should be kept in mind that there are other quality criteria for the national bibliography beside speed. More details as to the quality of the national bibliography can be gained by surveying the main users of the bibliography, e.g. other libraries.

A.1.2.1.6 Source

See ISO/TR 28118:2009, A.2.1[11].

A.1.2.1.7 Examples and further reading

Several national libraries count yearly the number of new entries in the national bibliography; see for example the British Library and the national libraries of the Netherlands, France and Finland.

The British Library, the National Library of the Netherlands and the National Library of Estonia also count the different types of material that have been catalogued during one year.

The National Library of Estonia has calculated the performance indicator for four types of materials registered in the Estonian national bibliography in 2015[3)]. The percentage of new entries (2014 and 2015) was:

— for books (incl. eBooks): 95 %;

— for sheet music (incl. electronic) 96 %;

— for maps (incl. electronic): 91 %;

— for audio-visual recordings (incl. electronic): 57 %.

The German National Library tested the performance indicator for 3 different sections of the German national bibliography[3)]. In 2006, the percentage of new entries (2005 and 2006) was:

— for commercial publications: 91 %;

— for non-commercial publications: 78 %;

— for doctoral dissertations: 59 %.

The Austrian National Library uses the indicator as described in ISO/TR 28118. In 2010, 85 % of the titles in the national bibliography were new entries, in 2015 even 86 % (see Reference [68]).

The National Library of Spain tested this performance indicator in 2014 and 2015 to assess the currency of the national bibliography. In 2014, 96 % of the new entries were from 2013/2014; in 2015, even 97 % were from 2014/2015 (see Reference [18]).

A.1.2.2 Percentage of rare materials accessible via web catalogues

A.1.2.2.1 Background

National libraries generally possess considerable collections of rare materials such as manuscripts, incunabula and rare books. Such collections are sometimes not yet fully catalogued, or the cataloguing data are only searchable via book, card or manuscript catalogues.

Such older catalogues are gradually converted into online catalogues in order to make the titles accessible for everybody via the web. The titles are either included in the main online catalogue of the library, or there are separate web catalogues for specified groups of rare material.

The national library sometimes also has the responsibility for the national database of incunabula or manuscripts.

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3) Not published.

A.1.2.2.2 Objective of the performance indicator

The performance indicator assesses whether the records of the rare collections are accessible via the web.

The performance indicator also measures the library's engagement in promoting its rare collection.

A.1.2.2.3 Definition of the performance indicator

This indicator is the percentage of rare materials in a national library's collection the records of which can be retrieved in the web catalogue(s) of the national library.

In the sense of this performance indicator, rare materials are incunabula, manuscripts, books published before 1800 and newer books that are made precious by their limited issue, by their binding, by dedications, and similar characteristics.

NOTE 1 Usually such material belongs to special collections with special shelf marks and is shelved separately in a secure location to which access is restricted.

NOTE 2 The definition excludes archives and records concerning private persons, institutions and organizations (collections containing manuscripts, letters, notes, photos, and other material given by bequest to the library or purchased as such by, or on behalf of, the library).

A.1.2.2.4 Method

Count the total number of rare materials in the library's collections. If the real number is not available, an estimate should be made.

Count the number of rare materials' cataloguing records that are contained in the library's web catalogue(s).

The percentage of rare materials accessible via web catalogues is calculated as shown in Formula (A.8):

$$\frac{A}{B}\times 100 \quad \text{(A.8)}$$

where

A is the number of rare materials the records of which are retrievable via web catalogues;

B is the total number of rare materials.

Round off to the nearest integer.

The performance indicator may be split up as to materials.

A.1.2.2.5 Interpretation and use of results

The performance indicator is an integer between 0 and 100.

A high score is considered as good. It means that a high percentage of the records of rare materials are retrievable via web catalogues and that therefore the materials can be easily located by users.

If the score is low, the national library could, for example, initiate projects for retrospective cataloguing of rare materials directly into the web catalogues.

Comparison between libraries is difficult because of the different structure of the rare collections and can be affected by national funding for retrospective cataloguing.

A.1.2.2.6 Source

See ISO/TR 28118:2009, A.2.2[11].

A.1.2.2.7 Examples and further reading

The National Library of Estonia owns 27 346 items in its rare collection, comprising Estonian books and manuscripts published before 1861 and foreign language books and manuscripts published before 1831. 96 % of the records of the rare materials are accessible via the library's online catalogue[4)].

The National Library of Scotland has a programme for making visible the library's "hidden collections". One of the goals in the plan 2016/2017 is to begin the retro-conversion of the final remaining manual catalogues (Manuscript and Music) to allow for online access. One of the key indicators is "percentage reduction in hidden collections", and the goal for 2016/2017 is 2 % (see Reference [63]).

A.1.2.3 Median time of document processing

A.1.2.3.1 Background

The background processes in a library are important for the delivery of library services. Their quality can be expressed by measures such as accuracy and speed. As the processing, i.e. acquisition and cataloguing, of new documents is a process that occurs in all libraries, it has proved convenient to evaluate the effectiveness of background services by the example of document processing.

In many libraries, acquisition and cataloguing processes are now combined in a media processing department and are carried out in one operation.

In some libraries, activities for catalogue enrichment, such as adding tables of content, summaries or book jacket texts, may be included in the processing.

A.1.2.3.2 Object of the performance indicator

The performance indicator assesses whether the different processing procedures are effective as to speed. The indicator is especially useful for monographs. It can be applied to different types of documents or different subjects.

Comparisons between libraries are possible, but only if differences in the level of descriptive cataloguing, subject cataloguing, binding policies, etc. are taken into account. When interpreting the results, differences in the use of copy cataloguing should be given special attention.

A.1.2.3.3 Definition of the performance indicator

This indicator is the median number of days between the day a document arrives at the library and the day it is available for the user on the shelf or in electronic form.

Document processing procedures include acquisition, descriptive cataloguing, subject indexing, binding (if applicable), physical processing (stamping, labelling, bar-coding, applying a magnetic strip, etc.), and shelving or adding a live link to the document.

A.1.2.3.4 Method

The period used for measurement (e.g. one month) is fixed by the user of the indicator. Collect data on documents arriving in the library during the specified period. Keep logs, either by a computerized library system or by a log sheet accompanying the document, through the process up to shelving.

For electronic documents, the end of processing will coincide with a live link to the document being added in the catalogue.

For each title, calculate the number of days between arrival and availability. Rank the titles according to the number of days elapsed.

The median time of document processing is the number of days that is in the middle of the ranking list.

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4) Not published.

If the number of titles is even, the median time of document processing is as shown in Formula (A.9):

$$\frac{A+B}{2} \tag{A.9}$$

where A and B are the two values in the middle of the ranking list.

Round off to the nearest integer.

Special processing procedures for different documents (e.g. rush procedures, gift and exchange documents) or specific types of documents (e.g. rare documents, posters) should be analysed separately. The median time of each stage of processing can be calculated in the same way.

A.1.2.3.5 Interpretation and use of results

The indicator is an integer with no top limit.

Long processing time can be caused by:

— failures in the sequence of procedures;

— delays due to stockpiling (backlogs);

— delays due to overload.

Possible management decisions based on the results could be:

— streamlining the processes;

— forwarding documents at shorter intervals to the next department;

— additional assignment of staff.

A.1.2.3.6 Source

See Reference [71] pp. 193-198 ("Media Processing Speed").

A.1.2.3.7 Examples and further reading

In the National Diet Library of Japan, the time required for books acquired at Tokyo Main Library (Japanese books) to become available for users in fiscal year 2015 was 12 days and for Japanese non-book materials (audio/visual materials) 13 days (median time)[5)].

The Austrian National Library uses the indicator as described in ISO/TR 28118. In 2015, the Median Time of Document Processing was 52 days (see Reference [68]).

The Bibliothèque nationale de France had in 2015 a delay of 5,1 weeks between receiving and cataloguing a legal deposit document (see Reference [22]).

The National Library of Estonia tested the indicator in the beginning of 2017 for monographic legal deposit copies. Processing time was 16 working days starting from the arrival in the library until availability in the shelves. Document processing procedures include the receipt, sorting, registration, technical processing, cataloguing, indexing, boxing and shelving. The indicator value for publicly available monographic online publications was 14 working days[5)].

5) Not published.

A.1.3 Digitization

A.1.3.1 Number of documents digitized per 1 000 documents in the collection

A.1.3.1.1 Background

Most national libraries hold a very important documentary heritage collection. An urgent objective today is to make these collections universally available via digitization projects. In most national libraries the digitization policy for the cultural heritage is an important part of the strategic planning.

National libraries are often chairing the national projects for the digitization of the national documentary heritage. One example is the Gallica digital collection constituted by the Bibliothèque nationale de France's collections as well as by the digital resources from the collections of over 270 partner institutions.

Currently, national libraries concentrate on digitizing copyright free material. Because of copyright restrictions, protected works cannot be reproduced without the consent of the rights' holders. In many national libraries established in the 20th century, rights-free documents constitute only a small part of the overall collection.

Digitization may have different aims:

— to conserve the original analogue material by substituting it for a digital surrogate;

— to make the material available for public use.

A.1.3.1.2 Objective of the performance indicator

This indicator assesses to what extent the library fulfils its task of making the documentary heritage publicly available in digitized format.

A.1.3.1.3 Definition of the performance indicator

The indicator is the number of documents digitized (by the library itself or other institutions) per year per 1 000 documents in the collection.

An item is only counted as digitized if the complete item has been copied.

NOTE 1 Digitization for preservation purposes is included.

NOTE 2 Mass digitization is included.

NOTE 3 Purchase of electronic copies for replacing print copies is excluded.

A.1.3.1.4 Method

Establish the number of documents in the library's collection which can be digitized. Count the number of documents digitized out of the collection in the reporting year.

The number of documents digitized per 1 000 documents in the collection is calculated as shown in Formula (A.10):

$$\frac{A}{B} \times 1\,000 \tag{A.10}$$

where

A is the number of documents digitized in the reporting year;

B is the total number of documents in the library's collection which can be digitized.

Round off to the nearest integer.

A.1.3.1.5 Interpretation and use of results

The indicator is a real positive integer with no top limit.

A high score shows the library's commitment to making its collection accessible.

Comparing the results between libraries is difficult, as the collection size may differ considerably, as well as the number of documents that are rights' free. But comparison over time and with the library's mission and goals are important for each library.

National heritage programmes can influence the performance indicator.

A.1.3.1.6 Source

See ISO/TR 28118:2009, A.5.1[11].

A.1.3.1.7 Examples and further reading

Several national libraries include digitization statistics in their reports.

The German National Library in its annual report informs on the number of documents (monographs, periodicals and special materials) as well as the number of pages digitized. By the end of 2015, the total of documents digitized was 69 949 which accounted for 8 289 650 pages. This represents an increase of 9 530 documents and 961 243 pages from 2014 (see Reference [37]).

The Bibliothèque nationale de France each year gives the total number of documents (monographs, periodicals, graphic documents, cartographic, sound and visual recordings, manuscripts and sheet music) available in digitized form (2 895 197 at the end of 2014, and 3 437 465 at the end of 2015). This indicates that 542 368 documents have been digitized or acquired in digitized formats in 2015 (see Reference [20]).

Other national libraries indicate, in addition to their digitization activity, the proportion of their collection that has been digitized.

The Swiss National Library reports that by the end of 2015, 22 118 documents were accessible online which accounts for 5,7 % of the 3 850 667 books and periodicals of the library's collections. The digital documents accessible online represent 12,1 million pages digitized (increase from 11,2 million pages at the end of 2014) (see Reference [23]).

The National Library of Australia indicates in its annual report the percentage of the total collection available to the public online (3,95 % in 2013/2014) which includes the percentage of the total collection digitized (3,62 % in 2013/2014). (See Reference [60].)

A.1.3.2 Percentage of documents digitized per special collection

A.1.3.2.1 Background

Most national libraries hold special collections that constitute an important part of the national documentary heritage, such as collections of one-leaf materials, incunabula or photos, maps, sheet music, posters or special subject collections relating to persons or historic events. An important objective is now to make these collections universally available through digitization.

A.1.3.2.2 Objective of the performance indicator

This performance indicator assesses to what extent the library fulfils its task of making its special collections publicly available in digitized format.

A.1.3.2.3 Definition of the performance indicator

The indicator is the percentage of documents digitized (by the library itself or other institutions) per special collection at a specified period of time.

NOTE 1 An item is only counted as digitized if the complete item has been copied.

NOTE 2 Digitization for preservation purposes is included.

NOTE 3 A special collection is defined as a collection of materials segregated from a library collection according to form, subject, genre, period, geographical area, condition, rarity, source, or value.

NOTE 4 The calculation of the percentage could be based on the number of titles, copies, in the case of periodicals also the number of annual volumes, or pages of objects/documents.

A.1.3.2.4 Method

Establish the number of documents per special collection of the library. If a full count is not available, the number may instead be estimated.

Count the number of documents that have already been digitized per special collection.

The percentage of documents digitized per special collection is calculated as shown in Formula (A.11):

$$\frac{A}{B} \times 100 \quad \text{(A.11)}$$

where

A is the number of documents in the special collection that have been digitized;

B is the total number of documents in the special collection.

Round off to the nearest integer.

A.1.3.2.5 Interpretation and use of results

The performance indicator is an integer between 0 and 100.

A high percentage is regarded as good as it shows the library’s commitment to making its collections accessible. The results are not comparable between libraries as each special collection is unique, but comparison over time and with goals is important for each library.

A.1.3.2.6 Source

See ISO/TR 28118:2009, A.5.2[11].

A.1.3.2.7 Examples and further reading

The National Diet Library of Japan digitizes rare books and old materials in its collection that were published up to Edo Period (1603-1868). As of November 2016, about 32 % (90 000 items in round numbers) had been digitized (see Reference [58]).

The Bibliothèque nationale de France gives an actual overview of the digitized documents and the planned programme for digitizing each special collection (see Reference [19]).

The collection of Estonian posters published since 1940 contains about 10 000 titles. By 2016, about 900 of them (i.e. about 9 %) have been digitized and are accessible via digital archive DIGAR. Another significant special collection at the National Library of Estonia is the map collection. The collection of

Estonian map editions contains about 7 500 titles, by 2016 about 460 of these (about 6 %) have been digitized and are accessible via the digital archive[6)].

A.1.3.3 Number of content units accessed per document digitized

A.1.3.3.1 Background

Most national libraries possess a very important documentary heritage collection. A crucial objective today is to make these collections universally available through digitization projects.

In order to evaluate the success of such measures, the usage of digitized material should be assessed.

A.1.3.3.2 Objective of the performance indicator

This indicator assesses whether the library has digitized documents that are relevant for its users.

A.1.3.3.3 Definition of the performance indicator

This indicator is the number of content units accessed per document digitized from the library's collection during a specified period.

NOTE 1 For the purpose of this indicator, only such digitized documents are considered that are available for public access, either inside the library or on the Internet.

NOTE 2 In the sense of this indicator, an access is defined as a successful request of a library-provided electronic resource.

A.1.3.3.4 Method

Establish the number of documents digitized out of the library's collection and that are available for public access. Count the number of content units accessed from these documents during a specified time period, normally a year.

The number of content units accessed per document digitized is calculated as shown in Formula (A.12):

$$\frac{A}{B} \tag{A.12}$$

where

- A is the number of content units accessed from documents digitized from the library's collection during a specified time period;
- B is the total number of documents digitized from the library's collection.

Round off to the nearest integer.

A.1.3.3.5 Interpretation and use of results

The indicator is a positive integer with no top limit.

A high number of accesses is regarded as good. It shows that the library has digitized documents that are relevant for researchers or the general public.

The indicator may be affected by several factors, some outside the control of the library. Examples are: the level of network access, whether or not fees are charged for access, and the promotion of the services.

6) Not published.

The number of content units accessed could also be affected by:

— the quality and efficiency of users' search strategies;

— the quality of metadata attached to the files;

— the efficiency of the search interface;

— the speed of the retrieval processes.

A.1.3.3.6 Source

See ISO/TR 28118:2009, A.5.3[11].

A.1.3.3.7 Examples and further reading

Specific statistics of content units accessed per document digitized are not available. While national libraries do not specify up to now this specific statistic, a number of national libraries report on the number of items digitized and the number of accesses to the digital collection that usually comprises both digitized and born digital documents.

The Bibliothèque nationale de France counts the accesses to digitized documents in the collection Gallica. In 2015, there were 15 980 981 accesses to the digitized documents. The average page views in 2015 progressed from 28 pages to 45 pages viewed per visit. There were 3 480 000 documents indexed and accessible in Gallica at the end of 2015 (see Reference [20]).

The National Library of Finland reported in their annual report 2015 that the digitized collection accounted for more than 10 million pages of resources at the end of 2015. There were 14 million downloads (see Reference [62]).

In the German National Library there were in 2015 40 851 389 accesses to the electronic collection that comprises 1 874 441 digital and digitized items (including 1 340 000 digitized tables of content)[7)].

The National Library of Estonia’s digital archive DIGAR allows users to download files and to view publications in the browser without downloading them. In order to know user preferences, the library calculated this indicator both for downloading and viewing[7)].

On July 1, 2016, there were 65 455 documents in the archive. Statistics from January 1, 2016 to July 1, 2016:

— 6 202 975 accesses = 94,77 per document;

— viewing in the browser 13 333 136 = 203,70 per document;

— total number of accesses 19 536 111 = 298,47 per document.

A.1.4 Preservation

A.1.4.1 Percentage of the collection in stable condition

A.1.4.1.1 Background

The physical condition of a collection is an important factor of its suitability for any form of use. Since unstable material will suffer additional damage if handled, the distinction between stable and unstable is a critical one, separating material that can be used from that which cannot. In the case of mould infestation there may be also health risks to human beings.

National libraries serving as research libraries have the task to preserve and to provide effective access to all materials published in their country. Therefore, collections should be in a stable condition.

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7) Not published.

A.1.4.1.2 Objective of the performance indicator

The performance indicator assesses whether the collection is usable and accessible in its original form. The performance indicator therewith assesses the adequacy of the library's activity to preserve the originals.

A.1.4.1.3 Definition of the performance indicator

The performance indicator is the percentage of materials in the print or manuscript collection that are in a stable condition.

Stable condition is defined as suitable for use. Stable material might have some damage, but can be used without immediate risk of further damage. Unstable material can be further damaged if used.

The performance indicator is restricted to the print and manuscript collection.

A.1.4.1.4 Method

A random sample of, at least, 400 documents of the print or manuscript collections is surveyed as to the condition of items in the sample. Documents are classified in four categories:

1) good condition: usable with the normally advisable care for the collection;

2) fair condition: disfigured or damaged but stable; can still be used with extra care and attention;

3) poor condition: shows signs of deterioration, no use possible without further damage;

4) unusable condition: completely unsuitable for production to users: so fragile and damaged that it is likely to suffer further if handled.

Categories 1) and 2) would be counted as stable, categories 3) and 4) as unstable.

The percentage of the collection in stable condition is calculated as shown in Formula (A.13):

$$\frac{A}{B}\times 100 \qquad \text{(A.13)}$$

where

A is the number of documents in stable condition;

B is the total number of documents in the sample.

Round off to the nearest integer.

A.1.4.1.5 Interpretation and use of results

The indicator is an integer between 0 and 100.

A high score is usually considered as good.

The indicator can be influenced by the frequency of use of the collections, the storage conditions and the availability of funding for preservation/conservation measures.

If the results show low stability, further surveys could target specific parts of the collection (e.g. medieval or modern manuscripts, cartographic material, newspapers) or the special kind of damage (e.g. mechanical, biological, acid paper) in order to prioritize preservation activities. Measures taken can include:

— control and improvement of environmental conditions (temperature and relative humidity);

— revision of the access and consultancy policy;

— changes in handling methods;

— storage in enclosures, e.g. boxes;

— conservation treatment;

— mass deacidification;

— rebinding;

— substitution of unusable documents by copies or surrogates or digitization.

A.1.4.1.6 Sources

See References [69] and [84].

A.1.4.1.7 Examples and further reading

The indicator is adapted from preservation survey programmes in Great Britain 2006 and 2013 (see A.1.4.1.6). The headline findings of the second preservation assessment carried out in a large number of archives and libraries in the UK show that 11 % of items surveyed were unstable (categories poor condition or unusable) and 89 % of items surveyed were stable (categories good and fair condition). Unstable items needed immediate action to enable continued use without further damage (categories 3 and 4 in this performance indicator).

During 1998 to 2000 the four Estonian libraries with functions of legal deposit carried out the joint preservation project THULE that examined the condition of Estonian-language publications issued between 1525 and 2000 (see Reference [41]).

The sample of the national library contained 1 869 print publications. 49,3 % of the national publications were undamaged or partly damaged (= percentage of the collection in stable condition). 50,7 % were damaged or heavily damaged.

The National Library of Spain has developed a preservation programme known as Identificación de Fondos Ácidos, Deteriorados y Ejemplares Únicos (IFADU)[8] since 2001. Items are classified in two categories depending on their condition:

1) good condition: usable with the normally advisable care for the collection;

2) poor condition: evidence of signs of deterioration (preservation measures applied).

The results 2014 to 2016 are shown in Table A.1[9]:

Table A.1 — Percentage of unusable documents

	2014	**2015**	**2016**
Number of documents (physical items) revised	3,715	3,663	3,982
Number of documents that were unusable (this corresponds to category 4 in 1.4.1.4)	475	263	519
Percentage of unusable documents	12,79 %	7,18 %	13,03 %

8) Identification and Recovery of Acids, Damaged and Unique Items.

9) Not published.

A.1.4.2 Percentage of rare materials needing conservation/restoration treatment that received such treatment

A.1.4.2.1 Background

Conservation as defined by ISO 5127 consists of all intervention techniques applied to prevent, arrest or delay deterioration of a document. Restoration is defined as those actions taken to return a document which has suffered deterioration or damage as closely as practicable to its original state.

Preservation is more broadly defined as all measures taken, including financial and strategic decisions, to maintain the integrity and extend the life of documents or collections.

Such preventive measures are usually much more cost-effective than intervention measures taken to remedy damage after deterioration has taken place. Conservation aims at preserving the materials in their original and authentic form taking into account their cultural, historical, aesthetic or artistic significance. Thus all information, including historic material and techniques, is retained, not only the textual information.

As national libraries' collections comprise publications and material the content and form of which make them cultural and often valuable artefacts that have to be safeguarded in their authentic form, national libraries have their own conservation staff, or employ an external professional conservator.

A.1.4.2.2 Objective of the performance indicator

The performance indicator assesses the library's engagement in the conservation/restoration of rare material in its original form.

A.1.4.2.3 Definition of the performance indicator

This indicator is the percentage of rare materials needing conservation/restoration treatment that received such treatment during one year.

In the context of this indicator, conservation/restoration is restricted to manual treatment techniques like reinforcing joints or mending tears.

NOTE 1 Mass conservation (deacidification) is excluded.

NOTE 2 Rare materials are defined as incunabula, manuscripts, books published before 1800, and newer books that are made precious by their limited issue, by their binding, by dedications, and similar characteristics.

A.1.4.2.4 Method

The number of items that received conservation/restoration is counted during a reporting year. The number of items needing conservation/restoration is assessed by a survey (see A.1.4.1). The groups 3 (poor condition) and 4 (unusable condition) in the survey are counted as needing such treatment.

The percentage of rare materials needing conservation/restoration treatment that received such treatment is calculated as shown in Formula (A.14):

$$\frac{A}{B} \times 100 \qquad \text{(A.14)}$$

where

- A is the number of rare materials needing conservation/restoration treatment at the start of the reporting period that received such treatment during the reporting year;
- B is the total number of rare materials needing conservation/restoration treatment at the start of the reporting period.

Round off to the nearest integer.

A.1.4.2.5 Interpretation and use of the results

The indicator is an integer between 0 and 100.

A high percentage is considered as good.

In order to get a more detailed view of conservation activities, the indicator should be calculated for different types of materials, such as manuscripts, newspapers, cartographic material.

If the results show a low percentage of items treated, actions to be taken could be:

— promoting the importance of preserving the documentary heritage in its original form via public media;

— trying for additional funds, for instance by an adopt-a-book programme;

— encouraging the research on new techniques, treatments and procedures for preservation;

— exploring and adopting more cost-effective techniques, treatments and procedures for preservation.

A.1.4.2.6 Source

See ISO/TR 28118:2009, A.8.2[11].

A.1.4.2.7 Examples and further reading

The National Library of Spain has tested the performance indicator as described here since 2011. The results shown in Table A.3 represent different samples each year (see Reference [18]):

Table A.2 — Percentage of rare materials needing remedial preservation treatment that received such treatment

	2011	2012	2013	2014	2015
Number of materials needing remedial preservation treatment at the start of the reporting period NOTE Data provided include: printed books (and other works) published before 1 800 books and books published after 1 800 with special features (signatures, original bindings, etc.). Items can be in poor condition, but also stable but with damage.	10,230	11,429	5,364	3,527	3,483
Number of materials needing remedial preservation treatment that received such treatment during the reporting year. NOTE Items have received at least one treatment of conservation. Data provided include restoration, new binding, rebinding, binding repairs, storage in boxes, etc.	5,545	6,982	4,479	1,486	1,873
Percentage of rare materials needing remedial preservation treatment that received such treatment	54 %	61 %	83,5 %	42,13 %	53,77 %

A.1.4.3 Percentage of storage space which has an appropriate environment

A.1.4.3.1 Background

Temperature, relative humidity, light and atmospheric pollution should all be considered carefully with respect to their potential to damage library and archive materials. Environmental control therefore means day-to-day monitoring of storage and reading rooms, exhibition areas and showcases.

Control of temperature and relative humidity is critical in the preservation of the written and printed heritage because organic material is hygroscopic, readily absorbing and releasing moisture. As relative humidity is dependent upon temperature, these two factors should be considered together. An unacceptable level of either temperature or relative humidity accelerates deterioration of materials. Additionally, exposing organic materials to visible and ultra-violet light causes fading of dyes, inks and pigments, and can accelerate the aging and embrittlement of paper, cloth and leather. Damage caused by light cannot be reversed and is cumulative. Air pollution contributes to the degradation of organic materials as particulate pollutants are acidic and may be abrasive. They may enter the library from outside, or may be generated by internal sources as products of material decay. Because of the fact that environmental conditions play a crucial role in preserving organic material such as paper, national libraries take especial care for storage rooms which ensure that the collections in the long-term are housed in compliance with the corresponding standard ISO 11799.

A.1.4.3.2 Objective of the performance indicator

The performance indicator assesses whether the storage environment adequately protects the collection.

A.1.4.3.3 Definition of the performance indicator

The percentage of storage space for the collection that offers an appropriate environment.

For this indicator, “appropriate environment” means adequate temperature, relative humidity (RH), light and air quality. The adequacy of temperature, RH, light and air quality for the long-term preservation of the main library and archive materials is defined by the ranges recommended in ISO 11799. In reference to RH and temperature, this document recommends the parameters shown in Table A.3.

Table A.3 — Climatic conditions

Condition (assuming 30 % to 40 % RH for each condition)	Temperature range °C	Suitability
Room	16 to 23	Fair
Cool	8 to 16	Good
Cold	0 to 8	Very Good
Subzero	−20 to 0	Necessary for some materials as colour photos and film
Source: ISO 11799.		

Rapid changes of temperature and RH should be avoided with all materials.

The indicator is relevant for the whole physical collection.

A.1.4.3.4 Method

Due to climate changes over the day and in the seasons, the data of temperature and relative humidity should be collected during a reporting year by non-stop measuring in storage rooms with professional measuring instruments.

The area (in square metres) of storage rooms with appropriate environmental conditions is compared with the total area of storage rooms in the library.

The percentage of storage space which has an appropriate environment is calculated as shown in Formula (A.15):

$$\frac{A}{B}\times 100 \tag{A.15}$$

where

A is the area of storage rooms with adequate environmental conditions;

B is the total area of storage rooms in the library.

Round off to the nearest integer.

A.1.4.3.5 Interpretation and use of results

The indicator is an integer between 0 and 100.

A high percentage is considered as good.

If routine monitoring shows constant levels of temperature and relative humidity according to ISO 11799, the environmental conditions for the documents are optimal.

It should be kept in mind that in some countries with high temperature and humidity, the real environment may deviate from the appropriate environment defined by ISO 11799.

Libraries should also consider the potential damage by light and lighting. Light in general is damaging and should be kept at a minimum. Direct daylight shall be excluded. A repository room shall not be illuminated more than is necessary for retrieval and replacement of documents, room inspection and cleaning. For the two latter purposes an illumination of about 100 lux on the floor level is sufficient (see ISO 11799).

ISO 11799 also provides guidance for ventilation and air quality, air pollutants and fire prevention, detection and extinguishing systems.

Environmental monitoring can be relatively easy and inexpensive. It can be difficult to attain the standards without installation of an air conditioning system, but it is important to aim for stability of environment given the damaging influence of temperature and relative humidity. By using ultraviolet protective glass or filter, curtains and sunshade to avoid the penetration of sunlight, the environmental conditions in storage and reading rooms can be optimized.

The potential damage by pollution can be reduced by filtering external air entering storage areas, or if filtration is not possible, by closing windows and doors effectively. To minimize the internal pollution of materials, equipment components, such as paints, have to be tested under this aspect. The use of storage enclosures in archival quality will protect collections considerably.

A.1.4.3.6 Sources

See ISO 11799[6] and ISO/TR 28118:2009, A.8.3[11].

A.1.4.3.7 Examples and further reading

A large-scale preservation assessment carried out in a large number of archives and libraries in the UK revealed that 68 % of post-1850 material is kept in inadequate environmental conditions. See Reference [84]. However, research at the Image Permanence Institute, Rochester, N.Y., has shown that a reduction from 72 °F (22 °C) to 62 °F (17 °C) at 50 % RH can double the life expectancy of paper. The same reduction at 40 % RH doubles life expectancy (see Reference [74]).

The Association of Research Libraries conducted surveys of special collections repositories in member libraries in 1995 and 2006 (see Reference [35]). One question was whether the storage area was equipped to provide controlled temperature and humidity. The results in 1995 showed that 70 % had equipment for controlling temperature, 57 % for relative humidity. In 2006, 72 % of respondents could control temperature, 64 % relative humidity.

This performance indicator has been tested in the National Library of Spain (BNE) since 2013. 100 % of the storage rooms in the BNE have an appropriate environment. The environmental conditions of all storage rooms as well as all exhibition areas are monitored by using an automated system and current information about temperature and HR for all storage rooms are reported by electronic data loggers in a regular basis (see Reference [18]).

A.2 Services

A.2.1 General

A.2.1.1 User satisfaction

A.2.1.1.1 Background

For all types of libraries, the assessment of users' needs and their satisfaction with the collections and services offered is a crucial issue. Users' needs and wishes can, for instance, be ascertained by the evaluation of usage data or of users' complaints and suggestions. Focus groups and personal interviews can be used for assessing user opinion. For a comprehensive overview most libraries prefer user satisfaction surveys that ask for the satisfaction of the user with the library's services and products. User surveys can be handed out or mailed to a random sample of users, or a web-based survey can be put on the library's website.

User surveys can ask for different levels of experience with library services:

— the particular experience and satisfaction with library services during the last library visit or the last use of a library service;

— the long-time experience and satisfaction with all or individual library services;

— the experience and satisfaction compared with the expected quality level.

Satisfaction surveys will assist in adapting a library's services to the needs and interests of the users. They reveal reasons for dissatisfaction and thus help to detect problems and shortcomings in the service delivery.

Designing a user satisfaction survey is less complicated in libraries with a defined population to be served as they know the structure and the level of education of their population. National Libraries have no such specified clientele; their services can be used by interested persons worldwide. User surveys for national libraries therefore will have to consider different user groups, such as:

a) walk-in users;

b) remote users (worldwide);

c) publishers;

d) other libraries that use the national library's services.

To survey remote users, the most useful method is to send questionnaires to those that have registered to use the library services.

A.2.1.1.2 Objective of the performance indicator

This performance indicator assesses the degree of user satisfaction with regards to the library services as a whole or with different services of the library.

Comparing the same library at different points in time is possible. Comparing different libraries is, in general, very difficult, and only valid if the circumstances, questions, and procedures are identical.

A.2.1.1.3 Definition of the performance indicator

This indicator is the average rating given by users on a numeric scale ranging from very unsatisfactory to very satisfactory expressing their perception of the library services as a whole, and of individual services offered by the library.

The rating should be on a numeric scale, for example:

— a four-point scale, from 1 to 4 with 1 as the lowest value;

— a five-point scale, from 1 to 5 with 1 as the lowest value;

— a seven-point scale, from 1 to 7 with 1 as the lowest value.

As some of the interviewees may not have information, experience or opinion about the topic in question, an extra answering alternative should be offered (for instance “I have not used the service in question”, “I don’t have experience of the topic”, “I have no opinion”).

A.2.1.1.4 Methods

A.2.1.1.4.1 General

There are various and competing measurement approaches for user satisfaction. The most used method is the direct measurement method where users rate the services and their attributes by their satisfaction and by the importance of the services to them on different scales. Another well-known approach in the library sector is the expectancy-disconfirmation paradigm in different variants. Users compare the actual product and service performance with their prior expectations. In cases where user expectations are met or even exceeded, the user is satisfied. This approach is also called gap analysis.

Recently, libraries have also tested a very simple method developed in the commercial sector that relies mainly on one question and that can be used without connection to a broader survey: net promoter score (NPS).

A.2.1.1.4.2 **Direct measurement method**

The library designs a questionnaire that lists the specific services and aspects of services which it wants to evaluate. Special questionnaires should be designed for each user group, such as walk-in users, remote users, publishers, or other libraries that use the national library’s services.

A four-, five-, or seven-point scale is generally provided for answering the questions. The same scale should be used throughout the questionnaire. Space should be given for additional comments.

The questionnaire should be tested by a small sample of users in each user group to see whether the questions are clear and understandable.

If the questionnaire is not sent directly to members of a specified user group, for example publishers or other libraries, questions about user status should be included in the questionnaire in order to differentiate between the needs of the different user groups.

The contents of the questionnaire could be as follows:

a) User status, such as age group, status (researcher, student, others);

b) Purpose of library use, such as study, research, professional interests, general interests;

c) Subject interests, such as medicine, language and literature, philosophy;

d) Frequency of library use, such as frequency of library visits, frequency of remote use, frequency of using special services (interlibrary lending, reference, online catalogue, etc.);

e) Satisfaction with specified library services and service aspects (on a numeric scale).

Such services could be:

— the collections (differentiated as to print and electronic books and materials, audio-visual materials, national and foreign collections);

— studying and reading facilities;

— opening hours;

— lending service;

— interlibrary lending and document delivery;

— online catalogue(s);

— library website;

— reference service;

— user training;

— exhibitions and other cultural events;

— staff (helpfulness, competence).

A random sample of users is then asked to fill out the questionnaire. The data can be collected by a postal or an electronic questionnaire, by face to face interview, or by telephone interview, as appropriate.

Calculate the mean user satisfaction for each service or aspect of service as shown in Formula (A.16)

$$\frac{A}{B} \tag{A.16}$$

where

A is the sum of the values for each service indicated by the users;

B is the number of persons answering the questions.

Round off to one decimal place.

This indicator is calculated and reported separately for each question in the survey. For each service, also count the frequency with which each value appears. Then calculate the percentage for each value. This additional analysis shows how the users' perceptions are distributed across the range of possibilities.

A specific selection of questions in the survey can be used to identify specific sources of dissatisfaction, and to identify the relative importance of various services.

A.2.1.1.4.3 Gap analysis method

Gap analysis can be used to study the factors of operation which affect the customers' satisfaction. The gap analysis shows how well the library has succeeded in responding to the customers' expectations. It provides additional information compared to the direct measurement method.

A questionnaire lists the specific services, and/or aspects of services which are to be assessed. Users are asked to rate the service they would like to receive and the service they currently receive. A four-, five-, or seven-point scale is generally provided for answering the questions. The same scale should be used throughout the questionnaire.

Questions about user status can also be included in the questionnaire. Different categories of users have different needs, so the data can be analysed to identify how satisfaction is related to these variables.

Draw a random sample of users and ask them to fill out the questionnaire. The data can be collected by a postal questionnaire, electronic questionnaire, face to face interview, or telephone interview, as appropriate.

The average user satisfaction for each service or aspect of service is calculated as shown in Formula (A.17):

$$\frac{A}{B} \tag{A.17}$$

where

A is the sum of the values for each service currently received indicated by the users;

B is the number of persons answering the questions.

Round off to one decimal place.

The gap between perceived and expected service quality for each service or aspect of service is calculated as shown in Formula (A.18):

$$G = \frac{A_p - A_e}{B} \tag{A.18}$$

where

A_p is the sum of the values currently received for each service indicated by the users;

A_e is the sum of the values they would like to receive for each service indicated by the users,

B is the number of persons answering the question.

Include only those persons answering both parts of the question. Round off to one decimal place.

This indicator is calculated and reported separately for each question in the survey. For each service, also count the frequency with which each value appears. Then calculate the percentage for each value. This additional analysis shows how the users' perceptions are distributed across the range of possibilities.

A specific selection of questions in the survey can be used to identify specific sources of dissatisfaction, and to identify the relative importance of various services. Questions relating to users' expectations of the various services can be used to identify those where there is the greatest discrepancy between expectation and experience.

A.2.1.1.4.4 Net promoter score (NPS)

The NPS was developed as company loyalty metric (see Reference [74]). The method found broad interest because of its ease of use.

The net promoter score is based on the assumption that when people recommend something to somebody, they take a sort of responsibility for the quality of what they recommended. The NPS is based on responses to a single question.

— How likely is it that you would recommend our company/product/service to a friend or colleague?

The scoring for this answer is most often based on a 0 to 10 scale (0 = not likely at all, 10 = very likely). Respondents are grouped as follows:

— Score 9-10 Promoters: loyal customers who will recommend the institution/service to others

— Score 7-8 Passives: satisfied but unenthusiastic customers, vulnerable to competitive services if available

— Score 0-6 Detractors: dissatisfied customers who can damage the reputation of the institution/service through negative word-of-mouth

The NPS is calculated by subtracting the percentage of respondents who are detractors from the percentage of respondents who are promoters. For purposes of calculating an NPS, passives count toward the total number of respondents, thus decreasing the percentage of detractors and promoters and pushing the net score toward 0.

Libraries have started to use NPS as a quick and simple way for assessing satisfaction grades of their users. Net promoter score can be used for the whole library as well as for specific services.

User satisfaction is calculated as net promoter score as shown in Formula (A.19):

$$P - D \tag{A.19}$$

where

P is the percentage of promoters of all respondents;

D is the percentage of detractors of all respondents.

Round off to one decimal point.

The NPS is a number on the range −100 to + 100.

EXAMPLE In a survey, 35 % of respondents are promoters (ticking 9 or 10), 20 % are passives (ticking 7 or 8), and 45 % are detractors (ticking 0 to 6). The NPS is 35 − 45 = −10.

In addition to their estimate of recommending the institution/service, the respondents are asked the simple question "Why?" which gives the opportunity of justifying their estimate. There are no pre-defined answers. The advantage is that spontaneous answers may cover a broad field and contain new ideas. The disadvantage is that it is difficult and labour-intensive to code and analyse the collected data.

A.2.1.1.5 Interpretation and use of results

For each service or aspect of service, this indicator is a number with one decimal place between 1 and 4, 1 and 5, 1 and 7, 1 and 9 or 1 and 10, depending on the scale chosen.

For the interpretation of the scores, it is important to bear in mind that the results are based on the subjective opinion of a random sample of users. Individual circumstances at the time of the survey can influence the answers.

An important factor is the expectation of the users. If they have not had experience of high quality services, they can be satisfied with lower quality, which is one reason why it is difficult to compare one library with another.

For the gap analysis method,

— If G = 0 (neutral), there is no gap between the perceived and expected quality of service;

— If G > 0 (positive gap), then perceived service is better than expected;

— If G < 0 (negative gap), then perceived service is worse than expected.

The closer the gap (G) is to zero, the better balance there is between satisfaction and importance.

The gap (G) between −0,5 and +0,5 may be considered acceptable, however:

— If G is between +0,5 and +1,0, too many resources may be allocated for the aspect.

— If G is between −0,5 and -1,0, measures to improve the aspect should be considered.

— If G < −1,0 or g > +1,0, the situation is critical: Immediate measures are necessary especially when G-value is negative.

High satisfaction rates are seen as good and can be used as an efficient marketing tool of the library. Low satisfaction with a service points to shortcomings in the service delivery. The open comments of users in the questionnaire can give more information about the reasons for dissatisfaction.

For the Net Promoter Score that ranges from –100 to +100, a positive number will generally be considered as good.

The indicator user satisfaction, whether calculated via direct measurement, gap analysis or Net Promoter Score, should always be used together with other indicators for service quality and with usage statistics for the services that are evaluated.

A.2.1.1.6 Source

Adapted from ISO 11620:2014, B.2.4.2[5] and Reference [73].

A.2.1.1.7 Examples and further reading

Many libraries have developed and used individual satisfaction surveys, but today there are also several options available for standard surveys. An overview of such surveys is given by Creaser (see Reference [34]).

In academic libraries, the LibQUAL+ survey developed by the Association of Research Libraries that uses the gap analysis has found wide acceptance (see Reference [55]).

In the UK, a standard survey has been developed by SCONUL, Society of College, National and University Libraries (see Reference [76]). The survey asks not only for the satisfaction with individual services but also for the importance of each service to the user. This supports management decisions where important services with low satisfaction rates would be tackled first.

In Australia, the Rodski survey, now Insync survey, is used in many libraries. Just as in the SCONUL survey it measures satisfaction with performance against importance of the service to the user (see Reference [75]).

National Libraries have in most cases used satisfaction surveys for special subjects or special user groups.

The National Diet Library of Japan has conducted surveys for on-site users and surveys for remote users every other year since 2004. They target on-site users and remote users alternately.

The library uses the following rating:

— satisfied = 100 points;

— somewhat satisfied = 50 points;

— somewhat dissatisfied = minus 50 points;

— dissatisfied = minus 100 points.

In the 2016 remote user survey, the average for remote users was 48,1 points. For librarians, the average was 56,6 points. Special need for improvement was “Ease to find information you need” of the NDL website (see Reference [59]).

The British Library regularly assesses in its key indicators:

— satisfaction of reading room visitors (97 % are either very or quite satisfied with the reading room services in 2015/2016);

— satisfaction with the ease of finding information on the library's website (88 % in 2015/2016);

— satisfaction with the exhibitions (customer enjoyment rating), (96 % in 2015/2016). (see Reference [29]).

The National Library of Scotland offers a survey for disabled users' satisfaction on its page for the information of users with special needs (see Reference [65]).

The National Library of Estonia has used the NPS method to measure the satisfaction of its users[10)]. NPS is based on the assumption that when people recommend something to somebody, they take a sort of responsibility for the quality of the recommended thing. The user is asked: How likely is it that you would recommend our company/product/service to a friend or colleague? (0 = not likely at all, 10 = very likely). Additionally, the customer is asked the simple question, "Why"?

The library has frequently used this method for the following groups or services:

— new visitors;

— reference service;

— professional training for librarians.

The National Library of Estonia also fulfils the function of a parliamentary library. In 2015, the library asked the members of parliament:

— What is the probability of you recommending the services of the parliament reading room of the national library to your friend or colleague?

An impact question was added: Please, describe how the library has helped you in your professional life.

The National Library of Finland used the NPS method to measure the user satisfaction of the Finna service that is a common user interface to the collections of Finnish archives, libraries and museums (see Reference [53]). The NPS was measured in surveys in the years 2016 and 2018. In 2016 (14 478 respondents), the score was 29,9 and in 2018 (33 443 respondents) it was 43,9.

The AMKIT Consortium, which coordinates cooperation among the Universities of Applied Sciences (UAS) libraries in Finland, used the NPS in its user survey in 2017. In this survey, the aggregated score was 62,7 (12 572 respondents), indicating very high user satisfaction.

A.2.2 Accessibility

A.2.2.1 Shelving accuracy

A.2.2.1.1 Background

National libraries are often the last resort for documents, especially for publications in the national imprint. To maximize the availability of their collections to users, the resources shall be organized in a logical system and maintained according to that system. Correct shelving is indispensable for quick access to the collection by users or staff. Incorrect shelving will affect the speed of document retrieval (see A.2.2.4).

Shelving accuracy and speed of reshelving have been incorporated into goals and service level agreements of all types of libraries and also of national libraries.

10) Not published.

A.2.2.1.2 Objective of the performance indicator

The performance indicator assesses to what extent documents that are recorded in the library's catalogue(s) are in their correct places on the shelves.

The indicator may be used for specified collections or subject areas. For each specified area within the library, the resulting indicators can be compared to see whether the rate of accuracy differs significantly.

Comparisons between libraries are possible if differences in storage and frequency of use are taken into consideration.

A.2.2.1.3 Definition of the performance indicator

The percentage of documents recorded in the library's catalogue(s) that is in the correct places on the shelves at the time of investigation.

Documents whose absence is accounted for in the library's records, for example, those that have not arrived from processing, on loan, taken out for bookbinding or repair or noted as missing, are not included in the sample.

As, in national libraries, the greater part of the collection are stored in closed stacks, the indicator is restricted to closed stacks.

A.2.2.1.4 Methods

A.2.2.1.4.1 Check a representative sample of shelves in closed stacks with the help of a shelf-list. For each document in the list, record whether it is shelved correctly. For all missing documents, check whether their absence is accounted for in the library's records.

Documents awaiting shelving should be reshelved before counting.

For this method, the shelving accuracy is calculated as shown in Formula (A.20):

$$\frac{A}{B}\times 100 \qquad \text{(A.20)}$$

where

A is the number of documents correctly shelved;

B is the total number of documents in the sample (excluding those whose absence is accounted for in the library's records).

Round off to the nearest integer.

NOTE The number of missing documents comprises both documents that have been misplaced and those that are lost if the latter have not been noted as missing in the library's records. This assumes that correct shelving implies frequent shelf-reading so that losses get noted at an early stage.

A.2.2.1.4.2 Check a representative sample of shelves in closed stacks. Count the number of documents on each shelf in the sample. Record all documents that are found in the wrong place irrespective of them being misplaced near to or far from their correct position.

For this method, the shelving accuracy is calculated as shown in Formula (A.21):

$$\frac{A-B}{A}\times 100 \qquad \text{(A.21)}$$

where

A is the total number of documents on the shelves at the time of investigation;

B is the number of misplaced documents on the shelves.

Round off to the nearest integer.

NOTE As an estimate, the simpler method shown in A.2.2.1.4.2 could be sufficient.

A.2.2.1.5 Interpretation and use of results

The indicator is an integer between 0 and 100. A high score means high a shelving accuracy. The shelving accuracy is affected by several factors. The most important are

— the frequency of shelf-reading, and

— the speed of reshelving.

The indicator could also point to the classification or other shelf-location system not being transparent and easy to use, or to the need for a security system.

For libraries where use varies much between parts of the collection, shelving accuracy should be assessed for the different parts of the collection separately, as documents in frequent use are more liable to misshelving.

A.2.2.1.6 Source

See Reference [71].

A.2.2.1.7 Examples and further reading

Correct shelving is crucial for the effective use of all library collections, but libraries usually do not collect data about this task or do not publish them.

The National Diet Library of Japan assesses shelving accuracy for items requested by users. In 2007, shelving accuracy in the closed stacks was 99,99 %[11].

The National Library of Spain uses the indicator as described in ISO/TR 28118. In 2015, the library checked 336 720 documents and found 99,83 % of correct shelving (see Reference [18]).

A.2.2.2 Direct access from the homepage

A.2.2.2.1 Background

Most libraries today offer information about their services and access to their electronic resources and services via their website. This is especially important for national libraries, as they do not primarily serve a local, but rather a national and international clientele. Because of this, remote access to their services is a crucial issue.

National libraries have different target groups with various interests and purposes when accessing the library website. Websites of national libraries should therefore offer a “sign-posting” for the main user groups. This should consider at least researchers, visitors, librarians/professionals, and publishers, but could also include groups like the media (press), business firms, friends and supporters of the library, or persons with special needs.

The quality of a library website is determined by its fitness for use. Contents and structure, language and design, navigation tools and accessibility taken together constitute the usability of the website.

11) Not published.

The homepage is the virtual entrance to the library. The design and contents of the homepage can be decisive for the success of the website visit. High-priority issues should be either visible directly on the homepage or accessible with at best only one click or key stroke. Therefore, quick access to the most-used services and resources via the homepage was chosen as indicator for website quality. It is an indicator that is applicable for every library homepage, easy to use, and with an informative content that enables the library to directly take steps for ameliorating access via the homepage.

A.2.2.2.2 Objective of the performance indicator

The performance indicator assesses whether the homepage leads directly or very quickly, with adequate terminology, to the most frequently needed information and the most-used services. Speed is measured by the number of clicks necessary to find the services.

Comparison will only be possible between libraries of similar mission if a standardized set of resources and services is evaluated.

The indicator does not evaluate the design or navigation of the website or the overall content of the website. Neither does it include accessibility for persons with special needs.

A.2.2.2.3 Definition of the performance indicator

The performance indicator is the accessibility of the most searched resources and services via the homepage of the library's website measured by the number of clicks and the comprehensibility of the terms used.

NOTE The homepage is defined as the main or opening screen of a website to which all other pages for users are linked.

A.2.2.2.4 Method

The method used is a type of cognitive walk-through. A small group of experts simulates user behaviour when seeking specified information via the homepage.

The first step is to define the services and resources that are most often searched for in the specific library. This includes the decision on which terms would be adequate and comprehensible to users when describing the services and resources on the homepage.

The set of main issues for the homepage of national libraries described here should be seen as a prototype that could be adapted to the special situation of a library. Information has been added as to the user groups that would be most interested in each of the issues.

National libraries frequently group their information on the homepage as to:

— collections;

— catalogues (search);

— services/use;

— visit us;

— about the library;

— news.

In addition, a heading called "Information for…" can lead to a selection of topics for new users, researchers and students, publishers, librarians, schools, business, etc.

Methods for searching the website, such as search functions, FAQ (frequently asked questions), sitemap, or A – Z, have not been included in the list as the question of the indicator is whether the most-used resources and services can be found directly, not via search functions. See Table A.4.

Table A.4 — Homepage composition and significant issues

Main issues	Other adequate terms	Possible general headings	Interested user group
Mission and legal bases	mandate, role of the library, collection policy, legal acts, statutes, duties of the library	about the library	all; especially publishers and libraries
Way to the library	address, location, visit us, how to reach us, map to library	about the library, contacts, directions	visitors
Opening times	opening hours, library hours, hours of operation	visit us, using the library	visitors
Online catalogue/s	catalogue(s), OPAC, search (with explanation)	how to find..., finding information, research aids	all
National bibliography		central bibliographic services, catalogue(s), how to find..., finding information, research aids	all
Lending services	circulation, loan service, borrowing, how to get a book	use, services	local users, visitors
Reference service	e-reference, reference questions, enquiries, ask a librarian, ask the library	information services	researchers, librarians
Registration for use	user card, library card, registering, membership, how to join	conditions for access, use, services	local and remote users
Interlibrary lending and document delivery	document supply, electronic delivery	how to get a book, how to get an article, services	local and remote users, libraries
Reproduction services	copying services, photographic service, digitization service, microfilming service	use, services	local and remote users, libraries
Digital collections	electronic library, electronic resources, digital resources, online resources, documents available online	collection/s, find a journal or article, electronic services, online services	all
News	events, forum, exhibitions	—	all
Contacts	addresses, staff directory	about the library	all
Information for... (e.g. researchers, publishers, authors, librarians, teachers)	services for..., portal for ...	services	different target groups

As a second step, the experts test the homepage as to the speed of finding the services/resources and as to the terminology being intelligible and adequate to users. The rating could be as shown in Table A.5.

Table A.5 — Homepage evaluation

Service/resource		Clicks	Points
	direct information on the homepage, e.g. address, opening times, search box for the catalogue	0	10
	adequate term on the homepage	1	8
	adequate term on the homepage	2	6
	adequate term on the homepage	3	4
	adequate term on the homepage	>3	0
	ambiguous term on the homepage	1	2
	ambiguous term on the homepage	>1	0

Each library will select its own list of “main issues” to be evaluated.

Only part of the “main issues” will appear directly on the homepage, but they should be only “one click away”. It is irrelevant for the rating whether the topics appear on the homepage in systematic order or in a “quick links” list.

On some homepages, lists of subheadings open directly when the mouse touches the term. This should be counted as one click, though no click is necessary, as the term the user is seeking cannot be identified directly when looking at the homepage.

“Ambiguous” means terms that users might misunderstand in their search.

Examples for “ambiguous” terms are as follows.

— The way to order books into the reading-room is placed under the heading “accessing materials”.

— Photocopying is placed under “document delivery”.

Terms named “possible general heading” in the lists above and leading to the requested information are rated as adequate language, but the necessary clicks from the general headings should be counted.

The accessibility of the most-used services/information is calculated as shown in Formula (A.22):

$$\frac{A}{B} \tag{A.22}$$

where

A is the total number of points reached for accessibility;

B is the total number of main issues on the list.

Round off to the nearest integer

A.2.2.2.5 Interpretation and use of results

The indicator is a positive real number between 0 and 10.

A high score would be considered as good. The following actions could be taken in order to achieve a better score:

Put a link to the most-used services directly on the homepage.

Change library jargon into user-friendly language: Task-based links like “find books” or “find articles” have proved to be easier to understand than terms like “databases” or “e-journals”. Users probably would not click on a link if they do not know what to make of the term.

Avoid abbreviations the users are not familiar with, such as “ILL”.

Use a consistent set of terms, such as not “periodicals” beside “e-journals”.

Evaluate frequently asked questions and place the topics on the homepage. If a question occurs frequently (e.g. “How can I become a user” or “Where can I find articles”), it may be more effective to have a link on the homepage than to refer the user to “FAQ”.

The problem in offering quick access to the main services via the homepage for all user groups is that the homepage shall, on one side, offer all relevant information and, on the other, shall not be overloaded and confusing. This can be a tightrope walk between conflicting wishes. Information on the homepage should be limited to the necessary.

A.2.2.2.6 Source

See Reference [71].

A.2.2.2.7 Examples and further reading

The Swedish National Library tested the indicator as described in ISO/TR 28118 in 2007 and calculated a score of 7,73[12].

The performance indicator was also tested in the National Library of Spain in 2014 and 2015; the result was a score of 7,53 (see Reference [18]).

A.2.2.3 Percentage of accesses to the online catalogue via mobile devices

A.2.2.3.1 Background

With the rise in smartphone use, library users will expect to connect to library services wherever they are. Therefore, libraries create library applications or websites for mobile phones and other mobile devices, such as tablets.

For several years now, national libraries have also been offering services for mobile devices, especially mobile online catalogues. This is done either by a special catalogue application or by an interface of the online catalogue for mobile access.

A.2.2.3.2 Objective of the performance indicator

The indicator assesses the success of the library in reaching its users through services for mobile devices.

Comparison between libraries is possible if a similar type of application or mobile interface is used for the online catalogue.

A.2.2.3.3 Definition of the performance indicator

The percentage of accesses to the online catalogue via mobile devices.

A mobile device is defined as a portable computing device, designed to be held and used in the hands, typically having a display screen with touch, pen and/or keyboard input and Internet connection.

EXAMPLE Mobile phones, eBook readers, or tablets.

In the sense of this indicator, an access is a successful request of a library-provided online service.

NOTE An access is one cycle of user activities that typically starts when a user connects to a library-provided online service and ends by a terminating activity that is either explicit (by leaving the database through log-out or exit) or implicit (timeout due to user inactivity).

A.2.2.3.4 Method

Count the number of accesses to the online catalogue via mobile devices as a subset of all accesses to the online catalogue during a specified period.

If the service has been designed independently of a special platform, weblog statistics can be used.

12) Not published.

If it is a specialized application, usage numbers should be able to be captured by means of that application.

NOTE 1 If the online catalogue is used inside the library, several users might make use of the same workstation one after another, and accesses could not be separated. In most systems, an access is cut off after a specified time of non-use thus avoiding part of the problem.

NOTE 2 Browser or proxy caching is likely to reduce the number of requests registered in log files.

The percentage of accesses to the online catalogue via mobile devices is calculated as shown in Formula (A.23):

$$\frac{A}{B} \qquad \text{(A.23)}$$

where

A is the number of accesses to the online catalogue via mobile devices,

B is the total number of accesses to the online catalogue.

Round off to the nearest integer.

A.2.2.3.5 Interpretation and use of results

The performance indicator is an integer between 0 and 100. A high score indicates that the mobile device catalogue is relevant for the library's users.

The indicator may be affected by several factors, some outside the control of the library, such as:

— the level of network access;

— the quality of the interface;

— the distribution of mobile phones in a country;

— the promotion of the service by the library.

A.2.2.3.6 Source

See ISO 2789:2013, 6.2.14.1[1].

A.2.2.3.7 Examples and further reading

The Koninklijke Bibliotheek (Netherlands) counted 4 111 accesses to the online catalogue for the month of July in 2016. Only 2,75 % of the accesses came by mobile phone and 2,72 % by tablet. The bounce rate – one-page visits only – was relatively high in both cases. The session time of mobile phone users was much shorter than when computers or tablets were used[13)].

The Bavarian State Library in Munich counted 6 837 000 accesses to the online catalogue during 2015, of which 113 664 (1,66 %) came by mobile devices (see Reference [16]).

A.2.2.4 Median time of document retrieval from closed stacks

A.2.2.4.1 Background

Due to their role as custodians of the national documentary heritage, national libraries store most of their collections in closed stacks. In addition, there can be a lack of space, so that some national libraries have had to locate part of their collections in off-site buildings.

In this context, the time spent in fetching materials from closed stacks to be delivered to libraries or users is crucial for a quick and effective access to the collection.

A.2.2.4.2 Objective of the performance indicator

The performance indicator assesses whether the retrieval processes are effective.

Comparing libraries is possible if local circumstances concerning buildings, transportation, etc. are taken into account.

13) Not published.

A.2.2.4.3 Definition of the performance indicator

The performance indicator is the median time elapsed between the request for a document placed in closed stacks and the moment it is available to the user inside the library or ready to be dispatched to users or other libraries.

The time interval is measured in library business hours (the hours the library is open for business, excluding weekends, holidays or other days that the library is closed).

A.2.2.4.4 Methods

Draw a random sample of documents owned by the library, stored in closed stacks and requested by users or in interlibrary lending and document delivery.

For each request, register the date and time of the day when the request was handed in and the time when the document was ready to be collected by the user or ready to be dispatched to the user or another library. Subtract the starting time from the finishing time, expressed in minutes or hours as seems most fit.

The median time of document retrieval from closed stacks is established by ranking the requests in ascending order by the retrieval time. The median time is the value of the request in the middle of the ranking list. If the number of requests is even, the median time is the average of the two values in the middle of the ranking list, rounded off to the nearest minute.

The sample may be established in two different ways.

a) The sample is drawn among the titles owned by the library and not on loan. The requests are made by the investigators or their proxies at random times during the sampling period and the time of handing the request in is recorded.

b) The sample is drawn among actual requests at the time when the documents are ready to be collected by the user or ready to be dispatched to the user or another library. The method presumes that the date and time of the request are recorded as part of the normal routine.

NOTE 1 Failed requests are left out of the calculation since no finishing time can be assigned to a failed request.

NOTE 2 Requests for documents in off-site storage are counted separately.

A.2.2.4.5 Interpretation and use of the results

The performance indicator is a real number with no top limit. The indicator is expressed in minutes or hours and minutes.

A short retrieval time is considered good. The retrieval time may be affected by the number of orders at peak times, by storage conditions or shelving accuracy.

If the retrieval time is too long, the library could:

— reorganize workflows;

— provide training for the shelving staff;

— increase the number of shelving staff, especially in peak times;

— introduce regular shelf reading in order to achieve high shelving accuracy.

A.2.2.4.6 Sources

See Reference [85] p. 112 (item F 95).

See Reference [71] pp. 202 - 205 ("Lending Speed")[71].

A.2.2.4.7 Examples and further reading

Several national libraries have included the time for document retrieval in their service standards.

The National Library of Australia undertakes in its service charter to deliver 90 % of items requested from onsite storage areas within 45 min. For items requested from its offsite store, the goal is to deliver 90 % of items within two hours of courier cut-off times (see Reference [61]).

The British Library's code of service to readers and visitors also includes targets related to the delivery time of items stored onsite and offsite. In the case of St. Pancras Reading Rooms, London, the codes establish that 90 % of collection items stored onsite will be delivered within 70 min and 90 % of collection items stored elsewhere in London within 3 hours. In the case of the Newspaper Reading Room, placed in Colindale, the library will deliver 90 % of collection items stored onsite within 60 min (see Reference [31]).

The key performance indicators included in the library's annual report for 2011/2012 show that the target for the collection items stored in St. Pancras Reading Rooms was met and even exceeded: the percentage reached was 94 % (see Reference [26]).

The National Library of Austria uses the indicator as described in ISO/TR 28118. In 2015, the retrieval time for a sample of 200 requests was 1 h and 36 min (see Reference [68]).

The National Library of Spain measures document retrieval time regularly. The goal is to complete the transactions within 30 min. In 2015, 99,35 % of requested publications were delivered within that time (see Reference [18]).

A.2.2.5 Speed of interlibrary lending

A.2.2.5.1 Background

National libraries are often the last resort for interlibrary loan, especially for publications in the national imprint. They are also, in many cases, responsible for managing national resource sharing systems and increasingly developing strategies, policies and standards for offering more efficient and effective interlending services both at the national and international level.

The "IFLA Guidelines for best practices in interlibrary loan and document delivery" recommend that libraries define performance indicators for service levels and turnaround time (see Reference [48]).

The necessity for performance assessment in interlibrary lending is evident and there is a general agreement in the literature that turnaround time (the time between the initiation and the completion of a request) is one of the primary and most widely used criteria.

A.2.2.5.2 Objective of the performance indicator

The performance indicator assesses the time interval for successfully completing an interlibrary loan or electronic document delivery transaction, from the initial request to sending the requested item(s), and thereby whether the delivery services are efficiently organized and what priority the library gives to its role in library resource sharing.

Comparing libraries may be possible if a similar type of lending and delivery system is used.

A.2.2.5.3 Definition of the performance indicator

The number of hours required for library staff to successfully complete an interlibrary loan or document delivery transaction.

A transaction is complete when the item is sent to the requesting library or directly to the user by the lending library.

The time interval is measured in library business hours (the hours the library is open for business excluding weekends, holidays or other days that the library is closed).

An interlibrary loan is a loan of a document in physical form or a delivery of a document, or part of it, in copied form, from one library to another which is not under the same administration.

An electronic document delivery in the sense of this indicator is the electronic transmission of a document or part of a document from the library collection to a user, mediated by library staff, not necessarily via another library.

Time received is the date and time the request is received by the lending library.

Time sent is the date and time the item requested was sent to the requesting library or directly to the user.

A.2.2.5.4 Method

The speed of interlibrary lending is calculated as shown in Formula (A.24):

$$\frac{A}{B} \tag{A.24}$$

where

- A is the number of hours to complete a specified number of interlibrary loans or document delivery transactions;
- B is the number of interlibrary loan plus document delivery transactions.

Exclude days the library is closed for business.

Round off to the nearest whole hour.

Sampling is possible. The recommended method is a "typical week." A "typical week" is a time that is neither unusually busy nor unusually slow. Avoid holidays, vacation periods, days when unusual events are taking place in the community or in the library. Choose a week in which the library is open regular hours.

If the "full count" method is preferred, data should be collected monthly to reduce the burden to staff when analysing the results.

A.2.2.5.5 Interpretation and use of the results

The performance indicator is a positive real number with no top limit.

A lower score is usually considered as good. It will inform the library whether its processes are organized efficiently.

The performance indicator can be influenced by the type of material that is requested and by the form of delivery. The delivery of a document from an electronic resource is quicker than if an item had to be fetched from the shelves and sent by fax or normal mail.

The performance indicator can also be influenced by internal conditions. Staffing, collection size, days the library may be closed for business, and delivery delays can greatly influence the score.

It is useful for the interpretation of the results to also consider background data and facts, such as the number of requests processed each year, the number of items requested from other institutions, whether specific collection formats (e.g. sound recordings, print serials) are available for interlibrary loan, or whether there are charges for interlibrary loan and document delivery.

A.2.2.5.6 Source

See Reference [50].

A.2.2.5.7 Examples and further reading

The National Library of Australia's Service Charter aims at dispatching items requested through a local library within 4 working days of receipt of request for the standard service or within 2 h to 1 day depending on the level of the priority service required. (see Reference [61]).

The library also follows the Australian Interlibrary Resource Sharing (ILRS) Code that for supplier turnaround time (the time between a supplying library receiving a request and dispatching the item or indicating impossibility of supply) has the following standards (see Reference [15]):

a) express: 2 h;

b) rush: 24 h;

c) core: 4 working days.

The Austrian National Library uses the indicator as described in ISO/TR 28118. In 2015, the speed of interlibrary lending for books was 13 h and 50 min (see Reference [68]).

Samenwerkingsverband van de Nederlandse universiteitsbibliotheken en de Koninklijke Bibliotheek (UKB) reports the cumulative percentage of interlibrary lending speed after 1 day which would be 80,44 % in 2016 and 85,48 % in 2015[14)].

The National Library of Spain measures the speed of interlibrary lending regularly. The goal is to complete the transactions within a maximum of 3 working days. In 2015, 98,6 % of the requests from other libraries were answered within that time (see Reference [18]).

The National Diet Library of Japan has the service standard to respond to 80 % or more requests for interlibrary loan, either by delivering the requested materials or by explaining the reason for not being able to deliver, within 3,0 working days after receiving requests.

The library also has the service standard for document delivery to respond to 80 % or more requests received via the Internet within 5,0 working days after receiving requests.

The results for 2015 fiscal year were 2,3 working days to respond to 80 % requests for interlibrary loan and 4,0 working days to respond to 80 % requests for document delivery (see Reference [57]).

A.2.3 Reference

A.2.3.1 Correct answer fill rate

A.2.3.1.1 Background

In the provision of any reference service (either traditional or digital) the most fundamental and logical goal is that correct answers be given to the reference questions received. Measuring the accuracy of answers therefore is crucial for assessing the quality of reference services.

In the context of national libraries, the study of the Conference of European National Librarians (CENL) on performance measures in European National Libraries (see Reference [14]) showed that the participating libraries considered this indicator the most relevant of the indicators included in ISO 11620.

National libraries support librarians and researchers by providing information based on their huge national and international collections that work as backup collections of the country. This indicator

14) Not published.

is even more important for national libraries than for academic or public libraries as it shows the reliability of their reference services as the last resort in the country.

A.2.3.1.2 Objective of the performance indicator

The indicator assesses to what extent reference staff is able to fulfil the primary requirement for a good reference service, namely to provide correct answers to questions.

Comparison between libraries would only be possible if the same predefined set of reference questions were used.

A.2.3.1.3 Definition of the performance indicator

This performance indicator is the number of reference questions answered correctly divided by the total number of questions handled.

A reference question is defined as an information contact that involves the knowledge or use of one or more information sources (such as printed and non-printed materials, machine-readable databases, the library's own and other institutions' catalogues) by library staff.

NOTE 1 A reference question can also involve recommendations, interpretation, or instruction in the use of such sources.

NOTE 2 One reference question can address several issues.

NOTE 3 The question can be delivered personally or by means of telephone, regular mail, fax or electronic media (via email, the library website or other networked communications mechanisms).

It is essential that libraries do not include informational (directional and administrative) questions, for example, for locating staff or facilities, regarding opening times or about handling equipment such as printers or computer terminals.

A.2.3.1.4 Methods

A.2.3.1.4.1 Of the various methods used, the unobtrusive test has been most extensively applied and described. It involves compiling a representative set of questions with their answers.

These are then used by proxy users or surrogates to be put to the staff involved in the information service as genuine questions without the staff being aware that they are being tested. This has the advantage of the service being evaluated under normal conditions.

Unobtrusive testing can be used as well for traditional face-to-face, telephone, or email contacts as for an online reference service. It might be easier to let proxy users put their questions in electronic form.

Libraries that make use of digital reference services should include those transactions in the calculation of this indicator. Reference filing usually includes reference questions, question sources, question users, process of retrieval, provision of results, etc.

To obtain valid results:

— The questions used should be chosen with great care (for national libraries this should include questions that are often put by librarians).

— The proxy users should be chosen to represent actual user groups as far as possible.

— Proxy users have to be properly coached on the way in which they should conduct themselves.

NOTE In many cases, it can be difficult to determine the "correct" answer to a question. This can affect the reliability and practicality of this indicator.

For this method, calculate the correct answer fill rate as shown in Formula (A.25):

$$\frac{A}{B}\times 100 \qquad (A.25)$$

where

A is the number of questions answered correctly;

B is the total number of questions handled.

Round off to the nearest integer.

A.2.3.1.4.1 In order to obtain a more realistic view of reference accuracy, a random sample of actual reference questions should be used.

The answers are evaluated by an expert group as to accuracy and completeness. As the correct answers have not been previously established, the degree of accuracy must be rated in a more specified way. The coding is similar to the one used by Dilevko[38]. See Table A.6.

Table A.6 — Rating of reference answers

Coding	
Complete answer	Referred to single source, complete and correct answer **OR** referred to several sources, of which one gave the complete and correct answer.
Partially complete answer	Referred to single source or several sources, none of which leads directly to answer, but one of which serves as a preliminary source.
Referral	No direct answer; referred to external specific source or person or institution.
No/incorrect answer	No answer; no referral (I don't know) **OR** referred to single inappropriate source **OR** referred to several inappropriate sources, none of which answers the question correctly.

NOTE The indicator can be calculated separately for "complete answers" and for "complete and partially complete answers”. Results designated "complete answers" reflect a library policy of directly delivering the information the user asks for. Results termed "complete and partially complete" reflect a library policy of showing the way for finding the information.

For this method, calculate the correct answer fill rate as shown in Formula (A.26):

$$\frac{A}{B}\times 100 \qquad (A.26)$$

where

A is the number of questions with complete or complete and partially complete answers;

B is the total number of questions handled.

Round off to the nearest integer.

A.2.3.1.5 Interpretation and use of the results

The indicator is an integer in the range of 0 to 100. A high score indicates a high accuracy.

It should always be borne in mind that this indicator focuses only on one aspect of reference service quality, namely accuracy.

The results are influenced by, for example, the choice of questions, the staff’s communication skills and the quality, variety and accessibility of reference sources.

The level of difficulty of the questions is also relevant. Note that some questions will have alternative answers, or answers which give a choice to the enquirer.

The performance of the reference staff, in respect of correctness, is affected by competing goals of teaching the user how to use the reference sources and of answering the question as quickly as possible.

The value of the test results can be enhanced by designing the test in such a way that the factors contributing to poor performance or the reasons for failure can be established, or by combining it with other forms of data collection. This should include information on procedures which the staff followed to clarify questions (communication skills), whether details of the source were provided with the answer, whether the user was referred elsewhere when no answer could be found, and what was the attitude of the staff.

In the context of an online reference service, the indicator can also provide useful information about procedures followed by staff and data resources used.

A.2.3.1.6 Sources

See References [44] and [70].

A.2.3.1.7 Examples and further reading

There are as yet no examples from national libraries.

A.2.3.2 Speed of reference transactions

A.2.3.2.1 Background

Speed of providing answers in reference transactions, which is often referred to as turnaround time, is another quality aspect for reference services besides the accuracy of answers.

Libraries have to take care that the speed of answering does not influence the quality of the answers. A study comparing five free digital reference services found that there is often a trade-off between speed of response and quality or accuracy of response (see Reference [33]). Therefore, national libraries should assess both speed and accuracy of responses when evaluating their reference services.

The indicator is also crucial for assessing the efficiency of reference service management. When improving the efficiency of reference services, libraries should try to reduce reference service costs and/or to save the time of the library user. The time required to respond to reference requests is a necessary component when measuring staff costs or productivity (see Reference [86]).

A.2.3.2.2 Objective of the performance indicator

The indicator assesses whether reference answers are provided in a timely manner. It can also be used to analyse the effectiveness of processes in reference services.

Comparison between libraries is possible if a similar type of reference service is provided (e.g. online reference).

A.2.3.2.3 Definition of the performance indicator

The performance indicator is the average total time (commonly known as turnaround time) required for library staff to complete reference transactions, measured in minutes, hours or days, depending on the type of services.

NOTE 1 This measures the total time of the transaction, not the staff time spent on the transaction.

NOTE 2 The time interval considers only library business hours (the hours the library is open for business, excluding weekends, holidays or other days that the library is closed).

A reference question is defined as an information contact that involves the knowledge or use of one or more information sources (such as printed and non-printed materials, machine-readable databases, the library's own and other institutions' catalogues) by library staff.

NOTE 1 A reference question can also involve recommendations, interpretation, or instruction in the use of such sources.

NOTE 2 One reference question can address several issues.

NOTE 3 The question can be delivered personally or by means of telephone, regular mail, fax or electronic media (via email, the library website or other networked communications mechanisms).

It is essential that libraries do not include informational (directional and administrative) questions, for example, for locating staff or facilities, regarding opening times or about handling equipment such as printers or computer terminals.

A.2.3.2.4 Method

Draw a random sample of reference transactions. A sample period should be a typical week which is neither unusually busy nor unusually quiet. Sample periods can be selected from various months throughout the year to offset peak periods and off periods. Exclude days when the library is closed for business. During the sample week, keep a count of the reference transactions on a daily basis.

The transactions shall be initiated within the sample week, but completion could take longer.

Record for each transaction the date and time when the library receives a reference question and the date and time when the library delivers the answer to the users. Negative answers (e.g. no source found) are included. The data may be collected by unobtrusive testing sheets. For digital reference transactions, the data can be collected by an electronically generated log.

The time needed for each delivery should be calculated by counting only the business hours of the reference services on the sampling days.

Include all time taken before providing the answer to the user regardless of the actual time spent working on the specific question.

The different modes of reference transactions (online, face-to-face, etc.) should be assessed separately as the types of questions differ greatly.

The speed of reference transactions is calculated as shown in Formula (A.27):

$$\frac{A}{B} \tag{A.27}$$

where

A is the total number of days, hours and minutes to complete the reference transactions in the sample;

B is the number of reference transactions in the sample.

A.2.3.2.5 Interpretation and use of results

The performance indicator is a positive real number with no top limit. A lower score is usually considered as good. It will inform the library whether its processes are organized efficiently.

The speed can vary immensely depending on whether face-to-face enquiries or written questions (fax, mail, online reference) are evaluated. Type and specialty of a question will also greatly influence the indicator result. Written questions to national libraries can be rather complicated as the national library often serves as the last resort for a problem.

When interpreting the results of this indicator, libraries should pay special attention to the quality of answers. It is not always desirable to have shorter turnaround times because in such cases accuracy may be impeded by speed. When a question is complicated or a user expects a comprehensive answer, longer turnaround time might result in better service for the user.

Some transactions may take much longer than others. It is useful to analyse the median speed and the distribution of turnaround times in such cases.

A.2.3.2.6 Sources

See References [45] and [56].

A.2.3.2.7 Examples and further reading

The National Diet Library of Japan has the service standard to respond to 80 % requests within 8,7 days (including library holidays) for reference enquiries by letter, email, and fax via libraries after receiving the request. The result for fiscal year 2015 was 8,8 days (see Reference [57]).

The National Library of Medicine of the U.S. undertakes in its customer service policy to answer questions by letter or fax within 7 working days, questions by web contact within 4 working days (see Reference [80]).

The National Library of Australia's service charter includes the service standard to respond to 90 % of information and research enquiries within 1 week of receipt; more complex enquiries may take up to 4 weeks (see Reference [61]).

The Code of Service to readers and visitors of the British Library includes among its targets to respond to all written enquiries within 10 days of receipt (see Reference [31]).

The National Library of Spain measures reference speed regularly. The goal is to answer reference questions within 3 working days. In 2015, 99,27 % of questions from outside the library were answered within 72 h, 71,53 % in less than 24 h (see Reference [18]).

The National Library of Austria took a sample of 100 reference questions both in 2010 and 2014. In 2010, transactions were completed within 17 h and in 2014, even within 10 h and 30 min (see Reference [68]).

A.2.3.3 Willingness to return

A.2.3.3.1 Background

National libraries support researchers and librarians by providing information based on their huge national and international collections that work as backup collections of the country. They are often the last resort for reference questions, especially concerning the national imprint.

It is therefore important for national libraries to assess not only the accuracy and speed of their reference transactions, but also the appreciation of the service by the users.

The reference services can be delivered both directly to users and through other library and information centres.

A.2.3.3.2 Objective of the performance indicator

The performance indicator assesses the effectiveness of a reference transaction by the user's willingness to return to the reference desk (or to a virtual reference service).

Comparison is possible between libraries if a similar type of reference service is provided.

The indicator is applicable for traditional face-to-face reference and for virtual reference.

A.2.3.3.3 Definition of the performance indicator

The performance indicator is the percentage of reference transactions after which users state that they are willing to return to the reference desk (to the virtual reference service) with another question.

A reference question is defined as an information contact that involves the knowledge or use of one or more information sources (such as printed and non-printed materials, machine-readable databases, the library's own and other institutions' catalogues) by library staff.

NOTE 1 A reference question can also involve recommendations, interpretation, or instruction in the use of such sources.

NOTE 2 One reference question can address several issues.

NOTE 3 The question can be delivered personally or by means of telephone, regular mail, fax or electronic media (via email, the library website or other networked communications mechanisms).

It is essential that libraries do not include informational (directional and administrative) questions, for example, for locating staff or facilities, regarding opening times or about handling equipment such as printers or computer terminals.

NOTE 4 Virtual reference questions can be delivered by email or web forms.

This indicator does not assess the speed of the reference transaction or the accuracy of the reference answers.

A.2.3.3.4 Method

A.2.3.3.4.1 Actual reference users

Actual users are questioned after a face-to-face or telephone reference interview in a follow-up interview or survey. After a reference transaction in a virtual reference service, a web survey is offered. Users answer the question as to their willingness to return.

— Based on the experience of this reference transaction, if you had the option, would you return to this reference desk (this virtual reference service) again with another question?

The willingness to return is calculated as shown in Formula (A.28):

$$\frac{A}{B}\times 100 \tag{A.28}$$

where

A is the number of persons answering “Yes”;

B is the total number of persons answering.

Round off to the nearest integer.

A.2.3.3.4.2 Proxy user method

Proxy or surrogate users ask a reference question face-to-face or by telephone at the reference desk (in the virtual reference service). They observe staff behaviour and all circumstances related to the reference transaction.

After the reference transaction, the proxy users answer the question as to their willingness to return.

— Based on the experience of this reference transaction, if you had the option, would you return to this reference desk (this virtual reference service) again with another question?

The willingness to return is calculated as shown in Formula (A.29):

$$\frac{A}{B}\times 100 \tag{A.29}$$

where

A is the number of persons answering “Yes”;

B is the total number of persons answering.

Round off to the nearest integer.

In order to know more about the reasons of willingness or non-willingness to return, libraries could ask more questions such as:

— Was the reference librarian (the virtual service) easily approachable?

— Did the reference librarian show competence?

— Did the reference librarian ask at least one question to find out more about your information needs?

— If you were referred to a source, either inside or outside of the library, did the librarian check whether you got a helpful answer?

— Did the librarian finally ask you whether the information provided fully met your information needs?

A.2.3.3.5 Interpretation and use of results

The indicator is an integer between 0 and 100.

A high score is considered good. It means that a high percentage of reference transactions were successful according to the rating of actual or proxy users.

If the score is low, the library can identify the reasons via the aspects rated by the users. One reaction could be to organize staff training in interpersonal skills.

A.2.3.3.6 Sources

See References [39] and [67].

A.2.3.3.7 Examples and further reading

National libraries apparently have not yet used this indicator as described here. However, a number of them have conducted satisfaction surveys of their different users.

The Swiss National Library had its last satisfaction survey of active users in 2015. One of the questions was whether the answers to reference questions were clear and comprehensible. On a scale of 1 to 10, the users rated the answers as 8,8[15].

A.2.4 Facilities

A.2.4.1 User places occupancy rate

A.2.4.1.1 Background

Most national libraries have reading rooms to provide for on-site use of their services. As facilities at reading rooms have limited capacity, it is important to determine whether a library is providing a

15) Not published.

sufficient number of seats for visitors. Libraries have to strike a balance between an efficient use of their physical premises and provision of facilities that are appropriate to users' needs.

In general, measuring the user places occupancy rate means measuring the probability that a user will find a free seat and therewith the priority that the library gives to its role as a place for reading and studying.

A.2.4.1.2 Objective of the performance indicator

The performance indicator assesses the overall use rate of user places provided for reading and working in the library, by estimating the proportion of the places in use at any given time. This indicator shows the value of the library as a local place.

A.2.4.1.3 Definition of the performance indicator

The performance indicator is the percentage of user places in use at the time of investigation.

User places are defined as places with or without seating or equipment, places in carrels, in seminar and study rooms, in the audio-visual departments of the library, and informal seating in lounges, group areas, etc.

NOTE 1 This excludes places in halls, lecture and auditory theatres intended for audiences of special events. The definition also excludes floor space and cushions on which users can sit.

NOTE 2 Places reserved exclusively for the use of staff are also excluded.

A.2.4.1.4 Method

Count the number of user places provided for reading and working, whether with or without seating or equipment, at the time specified.

Count the number of user places in use. Places which show evidence of being used, such as coats, bags, notebooks, etc. placed there, are counted as being in use, even if the user is absent.

Measurement may be conducted at a specified time of the day, the week or the year, e.g. peak times or off-peak times. This should be stated explicitly when using the indicator.

The user places occupancy rate is calculated as shown in Formula (A.30):

$$\frac{A}{B}\times 100 \tag{A.30}$$

where

A is the number of user places in use;

B is the total number of user places provided.

Round off to the nearest integer.

The user places occupancy rate should be measured at random intervals over a period of time as the occupancy can vary considerably. The mean occupancy rate for the period can then be calculated using Formula (A.31):

$$\frac{A}{B}\times 100 \tag{A.31}$$

where

A is the cumulated sum of the places in use;

B is the cumulated sum of the places provided.

Round off to the nearest integer.

It can also be informative to calculate the minimum and maximum occupancy rate.

A.2.4.1.5 Interpretation and use of results

The indicator is an integer in the range 0 to 100. It estimates the probability that a randomly selected user place is in use at any time, or at the times specified.

A high occupancy rate indicates a need to increase the number of user places. A low occupancy rate indicates excess capacity.

It should be noted that the occupancy rate can vary by time of day, week or year. It is important that a library accommodates the demand of peak times. In the case of libraries with several reading rooms, differences in occupancy rates can indicate a need to reallocate user places among rooms.

Longer opening hours can contribute to a better distribution of users needing places over the day/week, so that even with the same number of user places there might be lower occupancy.

The indicator may be influenced by the library's lending policies.

Occupancy rates do not show whether users feel comfortable with the number of places provided for them. Satisfaction with places can also depend on the space allowed for one user working place. The library should therefore also assess user opinion on this topic by satisfaction surveys.

A.2.4.1.6 Source

See Reference [81] pp. 82 - 88 (A special case of "Facilities Use Rate").

A.2.4.1.7 Examples and further reading

The report of activities of the National Library of France in 2006 shows an increase of the seating occupancy rate from 107 % in 2003 to 110 % in 2006 (see Reference [21]). Occupancy rates over 100 % show that seats were overbooked, or that there were queues waiting for seats.

The National Library of Estonia collects user statistics once in a quarter, during one week. The occupancy of user places is monitored by observation at 12:00, 16:00, 19:00 from Monday to Saturday during September to June, and in July and August at 13:00, 15:00, and 17:00 from Monday to Friday due to the library's shorter opening hours.

The total number of user places in 2015 was 552. The average user places occupancy at the monitored time was the following[16)]:

— Monday – 85

— Tuesday – 81

— Wednesday – 84

— Thursday – 83

— Friday – 75

16) Not published.

— Saturday – 84

The average weekly number of readers in reading rooms at a monitored time was 82.

The average yearly user places occupancy rate 2015 was 82/552 × 100 = 14,85 %.

The National Library of Spain uses this indicator in its reading rooms. The occupancy rates for 2015 were (see Reference [18]):

— overall occupancy = 23 %

— in the morning (Mon to Fri) = 24 %

— in the afternoon (Mon to Fri) = 23 %

— Saturday = 20 %

A.3 Cultural role

A.3.1 Events

A.3.1.1 Number of attendances per event

A.3.1.1.1 Background

National Libraries hold the documentary collection of national heritage which includes many unique items like manuscripts, incunabula, and other rare materials. In order to raise the awareness of the library's valuable collection, national libraries organize exhibitions and other events. It is even more important for national libraries than for public or academic libraries to make their collections more widely known to the public as they are one of the most distinctive and important cultural venues in the country.

In addition, some national libraries have the responsibility to care for the cultural level of the country by promoting national cultural policies and by taking the leadership in national literacy campaigns. Recently, such libraries have organized forums or lectures to promote media literacy and computer literacy, as well as print literacy.

Accordingly, national libraries organize various events in order to demonstrate their prominence in the country's cultural, intellectual and social life and to foster understanding and enjoyment of the national library and its collections. The quality of such library events and their relevance to the population is shown by the number of participants and by participants' satisfaction.

A.3.1.1.2 Object of the performance indicator

The performance indicator assesses whether events organized by the library attract a high number of attendances and therewith promote the library's collections and services.

Comparison between libraries can be difficult, especially if attendances at exhibitions are included.

A.3.1.1.3 Definition of the performance indicator

A.3.1.1.3.1 The performance indicator is the total number of attendances at the library's events during a full year divided by the number of events.

NOTE 1 Virtual attendances at events (i.e. via webcast, webinar, or other technologies) should be included.

NOTE 2 Virtual visits to online exhibitions are excluded.

A.3.1.1.3.2 Events, in the sense of this indicator, are pre-arranged activities with cultural, educational, social, political, scholarly, or other intent, e.g. exhibitions, author visits, literary discussions, workshops, etc.

NOTE 1 Only events arranged by the library are included. Events inside the library premises organized by institutions outside the library are excluded.

NOTE 2 User training lessons and library tours are excluded.

NOTE 3 Ongoing programmes are included. Each session of a programme is counted as one event.

NOTE 4 Virtual events are included.

NOTE 5 Exhibitions are only included if the library can count the visits to an exhibition separately from the normal visits to the library.

A.3.1.1.4 Method

Count or estimate the number of attendances at each library event and cumulate for the year.

Count the number of library events during the year.

The number of attendances per event can be calculated according to Formula (A.32):

$$\frac{A}{B} \tag{A.32}$$

where

A is the number of attendances at the library events;

B is the number of library events.

Round off to the nearest integer.

The indicator should be calculated separately for exhibitions and for other kinds of events as exhibitions might be open over a long time while other events occupy only a short time, and attendances may be limited by the space in which the events are held.

A.3.1.1.5 Interpretation and use of results

The indicator is an integer with no top limit.

A high score indicates that the events arranged by the library were relevant for the population.

A low score indicates that the events were not attractive for the population. The library should try to attract higher attendance by promoting the events via the media.

The result may be affected by the library's offering the same exhibition as an online exhibition on the web.

A.3.1.1.6 Sources

See References [40] and [71], pp. 154 – 157 (B.12).

A.3.1.1.7 Examples and further reading

In order to evaluate library events, quite a number of national libraries today count the number of events organized by the library and/or the number of attendants of library events. Not many libraries count (or publish) both.

The National Library of Austria, in its annual report for 2015, names 158 events (without exhibitions) and 60 014 attendances of those events (see Reference [68]).

The National Library of Scotland in its review of performance for 2011/2012 reports a total of 95 355 visits to exhibitions and other events of which 87 957 were exhibition visitors (see Reference [64]).

In 2015, the German National Library counted 224 events with a total number of 14 131 attendances (see Reference [37]).

In 2015, the Swiss National Library organized 131 events, including exhibitions, guided tours, and training sessions, with a total of 18 109 attendances[17)].

The National Library of Spain counted an average of 58 attendances per cultural event in 2014, and 63 attendances in 2015 (see Reference [18]).

As for the outcome of library events, some national libraries assess the attendants' satisfaction. Since 2009/2010, the British Library has been assessing the "exhibition visitors' enjoyment rating". In 2014/2015, 96 % of the visitors rated the enjoyment of their visit as excellent or good (see Reference [28]).

A.3.1.2 Number of publications in the media per event

A.3.1.2.1 Background

National Libraries hold the documentary collection of national heritage which includes many unique items such as manuscripts, incunabula, and other rare materials. In order to raise the awareness of the library's valuable collections, national libraries organize exhibitions and other events.

National libraries also organize events for promoting national cultural policies and national literacy campaigns.

The events organized by national libraries can have a cultural, educational, social, political, or scholarly intent.

A.3.1.2.2 Objective of the performance indicator

The indicator assesses the library's success in obtaining media attention and therewith public interest for its events.

Comparison between libraries is possible if the differences between types of events are taken into consideration.

A.3.1.2.3 Definition of the performance indicator

A.3.1.2.3.1 The performance indicator is the number of publications in the media per event organized by the library.

A.3.1.2.3.2 The publications include reports, papers and audio-visual documents dealing with the library in the media (newspapers, television, radio, etc.) both in traditional format and on the Internet.

NOTE Comments to reports and papers and short notices (e.g. as to modified opening times) are excluded.

A.3.1.2.3.3 An event is defined as a pre-arranged activity with cultural, educational, social, political, scholarly, or other intent, such as exhibitions, author visits, literary discussions, workshops, etc.

NOTE 1 Only events arranged by the library on its own or in partnership with other institutions are included, whether inside or outside the library premises. Events inside the library premises organized by institutions outside the library without the library's cooperation are excluded.

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17) Not published.

NOTE 2 User training lessons and library tours are excluded.

NOTE 3 Ongoing programmes are included. Each session of a programme is counted as one event.

NOTE 4 Virtual events are included.

A.3.1.2.4 Method

Establish the number of library events in the specified period.

Count the number of publications in the media in the same period that relate to the library's events.

NOTE If the same report, paper, etc. is published in several media (e.g. several newspapers), it should be counted separately for each medium.

The number of publications in the media per event can be calculated using Formula (A.33):

$$\frac{A}{B} \tag{A.33}$$

where

A is the total number of publications on events in the media,

B is the number of events.

Round off to the nearest integer.

Publications on the Internet (e.g. on news websites, weblogs, or social media) should be counted separately.

A.3.1.2.5 Interpretation and use of the results

The performance indicator is a positive real number with no top limit.

A high score is usually considered as good. It will show whether the library was successful in reaching the interest of the media and the general public.

The indicator does not consider whether the media reports were positive or negative.

The performance indicator is influenced by several factors.

— The type and topic of the events: The presentation of a spectacular acquisition or an exposition opening with famous actors will attract more media interest than an academic paper or an author visit.

— The time of year or week: In times with a dearth of news the media can be more disposed to report about library issues.

A.3.1.2.6 Source

N/A.

A.3.1.2.7 Examples and further reading

The National Library of the Netherlands counts the notices about the library in Dutch newspapers (105 in 2015). In addition, a media monitoring searches for online notices using specific terms such as the name of the library, "historical maps", or "national digital library". The search terms can vary per year (see Reference [52]).

A.3.2 Educational services

A.3.2.1 Percentage of staff time spent on educational services

A.3.2.1.1 Background

National libraries have traditionally offered user training for the use of library and other information services. This has been and is still being done in the form of library tours or as teaching sessions.

In recent years, national libraries have taken up the task of supporting education and learning by offering learning sessions, learning materials and programmes for children and adults, providing services for schools and cooperating with other libraries in preparing and offering educational services. As the development and maintenance of such services is labour-intensive and demands skills and expertise, the national library often has to take a leading role in this area.

The time spent on direct user training and on educational services can be seen as a measure of the library's engagement in furthering education and learning.

A.3.2.1.2 Objective of the performance indicator

The performance indicator assesses the percentage of staff time allocated to developing and delivering user training and educational services in all formats for the purpose of enhancing skills in library and information use.

Comparison between libraries is possible.

A.3.2.1.3 Definition of the performance indicator

The performance indicator is the proportion of total working hours the library invests in formal user training and educational services as a percentage.

Formal user training is defined as a training programme set up with a specified lesson plan which aims at specific learning outcomes for the use of library and other information services.

In the sense of this indicator, educational services include the offer of learning sessions and learning materials and programmes in all formats for children and adults, providing services for schools and cooperating with other libraries in preparing and offering educational services for the purpose of enhancing skills in library and information use.

NOTE Education of librarians is excluded.

A.3.2.1.4 Method

Count the number of hours spent by library staff in developing and delivering formal user training and educational services in all formats during a specified time period, usually a year.

Count the working hours that are available during the same period in theory (gross working hours including holidays and times of illness).

NOTE 1 Temporary staff and project staff are included.

NOTE 2 Volunteers and persons in janitorial services are excluded.

The percentage of staff time spent on educational services can be calculated using Formula (A.34):

$$\frac{A}{B} \times 100 \tag{A.34}$$

where

A is the total hours spent developing and delivering training sessions and educational services during a specified time period;

B is the total number of working hours available in the library during the same period.

Round off to one decimal point.

A.3.2.1.5 Interpretation and use of the results

The performance indicator is a real number in the range 0 to 100.

Libraries shall strike a balance in the proportions of time that staff spends in various activities. A high percentage of staff time spent on user training and educational services can indicate high demand from users. A low percentage can indicate an unmet need. Libraries should consider other factors such as user satisfaction and levels of resource use when interpreting the results of the indicator.

The performance indicator can be affected on the one side by the number and length of training lessons offered and by the class size, on the other side by other libraries in the country offering educational services.

The quality of user training lessons should be monitored by satisfaction questionnaires and/or by tests that assess the learning outcome of users. In case of low attendance at training lessons, the library could promote the training lessons and try to assess the users' needs for specified training lessons.

A.3.2.1.6 Source

Adapted from ISO 2789:2013, 6.7.7[1].

A.3.2.1.7 Examples and further reading

N/A.

A.3.3 Research

A.3.3.1 Number of research publications per professional staff member

A.3.3.1.1 Background

National libraries promote the national documentary heritage and especially their rare collections by publications in order to make their collections more widely known to the public. This can require scholarly work on specific collections or documents by members of the library staff, singly or in cooperation with researchers.

National library professional staff also often joins in library and information research.

A.3.3.1.2 Objective of the performance indicator

The performance indicator assesses to what extent the library engages in promotion of its documentary heritage and in library and information research.

A.3.3.1.3 Definition of the performance indicator

The performance indicator is the number of research publications per year per professional member of the library's staff.

Library staff research publications can concern professional and academic subjects and include publications in all formats, and presentations at conferences.

Professional staff in the sense of this indicator is defined as library employees who have received training in librarianship, information science and/or another specialist discipline, such as economics or preservation, and whose duty requires professional education or experience.

NOTE The training can be by formal education or by means of an extended period of work of a professional nature under supervision, generally in a library.

A.3.3.1.4 Method

Count the number of library staff research publications in the specified period.

Establish the number of professional staff members (number of persons not FTE).

The number of research publications per professional staff member can be calculated using Formula (A.35):

$$\frac{A}{B} \tag{A.35}$$

where

A is the number of professional staff research publications;

B is the number of professional staff members.

Round off to one decimal point.

A.3.3.1.5 Interpretation and use of the results

The performance indicator is a positive real number with no top limit.

A high score is usually considered as good. It will show whether the library staff engages in scholarly work and library and information research.

The performance indicator can be influenced by several factors:

— the composition of the collections; a significant part of rare or unique materials will instigate research publications;

— the cooperation of the national library with researchers;

— the library's projects in library and information research;

— events such as exhibitions, important donations, etc. that induce publications.

The indicator results can also be influenced by specific workload in a year that impedes research work.

A.3.3.1.6 Source

See ISO 2789:2013, 6.5.2 and 6.7.2[1].

A.3.3.1.7 Examples and further reading

The National Library of Scotland uses a set of key performance indicators including "staff research". In 2010/2011, the library counted 53 staff research publications, in 2011/2012 48 publications (see Reference [64]). The current corporate plan contains a commitment that the library will actively support staff in research, scholarship and knowledge transfer activities.

A.4 Management

A.4.1 Cost-effectiveness

A.4.1.1 Employee productivity in document processing

A.4.1.1.1 Background

National libraries, like all other libraries, shall demonstrate that they have organized their processes cost-effectively. Assessing employee productivity is an important issue when evaluating the organization of the library. There are two service areas in the library that best allow comparing efficient processes with other libraries as they exist in similar form in all libraries: the document processing department and the lending and delivery services.

For document processing, indicators of quality are the speed and accuracy of processing. Efficiency can be assessed by comparing the output of one full-time equivalent (FTE) over time and with results in other libraries. The results are especially interesting for the funding institution as the question of how much staff is necessary for the library's tasks is one that is always debated between libraries and their funding bodies.

A.4.1.1.2 Objective of the performance indicator

The performance indicator exemplarily demonstrates overall employee productivity by measuring employee productivity in document processing.

The indicator is useful for comparison over time. Comparison to other libraries is possible if differences in the acquired documents and in the workflow and the methods of document processing are taken into account.

The indicator does not measure the quality (speed and accuracy) of the processing activities.

A.4.1.1.3 Definition of the performance indicator

The performance indicator is the average number of acquired materials (print and electronic documents) processed per employee in a certain period (usually one year).

Document processing in the sense of this indicator includes acquisition and cataloguing, but does not include retrospective cataloguing.

Documents in the sense of this indicator include all types of materials.

A.4.1.1.4 Method

Count the number of print and electronic documents acquired in a certain period (usually one year). For electronic periodicals and newspapers, an annual subscription is counted as one volume.

Calculate the number of FTEs involved in acquisition and cataloguing (including the acquisition and cataloguing of periodicals, but excluding retrospective cataloguing). Include temporary and permanent staff as well as project staff. Because employees are sometimes involved in several tasks, the time they spend on each task should be logged during a representative period. Thus, the proportion of time that every employee dedicates to document processing can be calculated. If time logging is not possible, this proportion may, instead, be estimated.

The employee productivity in document processing can be calculated using Formula (A.36):

$$\frac{A}{B} \tag{A.36}$$

where

A is the number of documents acquired in a certain period;

B is the number of FTEs involved in document processing.

Round off to the nearest integer.

As procedures and average time for processing varies for each type of material, employee productivity in document processing should be calculated separately for each type of material.

A.4.1.1.5 Interpretation and use of results

The indicator is an integer with no top limit.

A higher score will usually be considered as good.

The indicator can be influenced by the type of documents to be processed, the methods of document processing, the possibility of copy cataloguing, and the qualifications of staff in document processing.

This indicator should not be applied in cases where the above responsibilities have been outsourced, e.g. by buying cataloguing data.

If the employee productivity seems too low, the library might:

— reconsider the level of description for specified groups of materials;

— revise workflows;

— use more automated procedures;

— intensify staff training;

— increase the number of imported data by cooperation with other libraries in the country.

A.4.1.1.6 Source

See Reference [32], pp. 82 – 84.

A.4.1.1.7 Examples and further reading

The indicator was used by the German benchmarking project BIX for academic libraries. The results in 2015 showed the following scores for documents processed per FTE (see Reference [25]):

— 4 865 documents in universities of applied sciences;

— 3 580 documents in universities with a one-tier library system;

— 3 148 documents in universities with a two-tier library system.

The National Library of Spain tested this performance indicator in 2015 to assess effectivity in cataloguing modern monographs (see Reference [18]). The score was 20 full bibliographic records (including cataloguing, indexation, subject analysis, capturing metadata for authority control and holding description for each monograph), per employee, per day. Acquisition is not included in these calculations. Retrospective cataloguing is included as the same staff does both current and retrospective cataloguing.

The indicator was also tested for rare books cataloguing, and the score was 4 bibliographic records (including cataloguing, indexation, subject analysis, capturing metadata for authority control and holding description for each monograph), per employee, per day.

A.4.1.2 Employee productivity in lending and delivery services

A.4.1.2.1 Background

National libraries, like all other libraries, must demonstrate that they have organized their processes cost-effectively. There are two service areas in the library that best allow comparing efficient processes with other libraries as they exist in similar form in all libraries: the media processing department, and the lending and delivery services.

For lending and delivery services, indicators of quality can be the speed and accuracy of delivery. Efficiency can be assessed by comparing the output of one full-time equivalent (FTE) over time and with results in other libraries. The results are especially interesting for the funding institution as the question of how much staff is necessary for the library's tasks is one that is always debated between libraries and their funding bodies.

A.4.1.2.2 Objective of the performance indicator

The indicator exemplarily demonstrates overall employee productivity by measuring employee productivity in the lending and delivery services.

The indicator is useful for comparison over time. Comparison between libraries can be possible if the different percentages of types of loan and delivery are considered.

The indicator does not measure the quality (speed and accuracy) of the service delivery.

A.4.1.2.3 Definition of the performance indicator

This indicator is the total number of loan transactions during one year divided by the number of employees (FTEs) involved in local lending, interlibrary lending and document delivery, including staff retrieving items from the shelves and photocopying/scanning for delivery.

Loans for the purpose of this indicator include:

— local loans, including in-house loans;

— interlibrary loans;

— electronic document delivery transactions.

NOTE Renewals are excluded.

A.4.1.2.4 Method

Count the number of local loans (including in-house loans), interlibrary loans and electronic document deliveries during one year.

Calculate the FTE of staff involved in local lending, interlibrary lending and electronic document delivery, including staff retrieving items from the shelves and photocopying/scanning for delivery. Include temporary and permanent staff as well as project staff.

Because employees are sometimes involved in several tasks, the time they spend on each task should be logged during a representative period, preferably a month. Thus, the proportion of time that every employee dedicates to local lending, interlibrary lending and electronic document delivery can be calculated. If time logging is not possible, this proportion may, instead, be estimated.

The employee productivity in lending and delivery services can be calculated using Formula (A.37):

$$\frac{A}{B} \qquad \text{(A.37)}$$

where

A is the number of local loans, interlibrary loans and electronic document deliveries during one year;

B is the number in FTE of staff involved in lending and delivery services over the same period.

Round off to the nearest integer.

NOTE In certain cases, especially when a part of the activities has been outsourced, it can be useful to calculate staff productivity separately for local loans and for interlibrary loans + document delivery.

A.4.1.2.5 Interpretation and use of results

The indicator is an integer with no top limit.

A higher score will usually be considered as good.

The indicator can be influenced by the types of media to be delivered, the percentage of the different types of loan and delivery, and the organization of the workflow.

If the employee productivity seems too low, the library could try to:

— revise workflows;

— intensify staff training.

A.4.1.2.6 Source

See ISO/TR 28118:2009, A.9.4[11].

A.4.1.2.7 Examples and further reading

The indicator was used by the German benchmarking project BIX for academic libraries until 2016, but included only loans and interlibrary loans. The results in 2015 showed the following scores for loans and interlibrary loans processed per FTE (see Reference [25]):

— 34 046 transactions in universities of applied sciences;

— 27 872 transactions in universities with a one-tier library system;

— 30 440 transactions in universities with a two-tier library system.

In general, national libraries count the number of loans and document deliveries per year. Some of them report also the number of staff members working in lending and delivery services. For an accurate analysis of processing effectiveness, time logging as described in this indicator will be necessary.

The National Diet Library of Japan tested the indicator in 2006 and calculated an average of 25 560 transactions per FTE including onsite loans, interlibrary loans and document delivery[18)].

A.4.1.3 Staff costs per title catalogued

A.4.1.3.1 Background

Libraries need data about the costs of their individual products and services for resource management, reporting, budget appliances and for justifying the library's expenditure.

18) Not published.

If the costs per unit of individual products and services are known, comparisons between services and benchmarking with other libraries is possible. Additionally, the staff will gain a better understanding of the cost implications of practices and policies.

Cataloguing is chosen as an example in this indicator as it is generally necessary in all libraries, and therefore, the results can be compared between libraries.

In the case of national libraries, due to their responsibility for creating the national bibliographies of their respective countries, the cataloguing tasks are crucial for the assignment of staff resources.

A.4.1.3.2 Objective of the performance indicator

The indicator assesses the staff costs of a specific policy for producing bibliographic records.

The indicator should be split up as to different types of documents.

Both complete and partial production of records and the import of data are included.

Comparison of libraries is possible if the percentage of copy and/or minimal cataloguing, the type of subject cataloguing and classification, and differences in salaries are taken into account.

A.4.1.3.3 Definition of the performance indicator

The indicator is the staff cost of providing a description of a document and its logical and coherent insertion into a catalogue file, divided by the number of titles catalogued.

For this indicator, only cataloguing of the legal deposit/national publications should be considered.

NOTE 1 Cataloguing of web archives is excluded.

NOTE 2 For the purpose of this indicator, the term cataloguing refers to the physical description of a document and includes copy cataloguing, full original cataloguing, minimal original cataloguing and re-cataloguing.

NOTE 3 Capture of authority records, subject analysis, indexing, classification and holding descriptions are also included as a part of the entire procedure for cataloguing one bibliographic record.

NOTE 4 Creation or modification of authority records is included.

NOTE 5 For the purpose of this indicator, staff costs include wages and other employee benefits.

To avoid misunderstandings, the user of the indicator should state explicitly what type and part of cataloguing is included in the calculation.

A.4.1.3.4 Method

The period used for measurement is fixed by the user of the indicator. Data should be collected during the defined sample period. Only cataloguing of the legal deposit/national publications should be counted.

To obtain the number of hours spent on producing bibliographic records, staff involved in cataloguing note the time they spend on this task during the sample period, as employees are sometimes involved in several tasks. Thus, the proportion of time that every employee dedicates to cataloguing can be calculated. If time logging is not possible, this proportion may, instead, be estimated.

The staff costs per title catalogued can be calculated as shown in Formula (A.38):

$$\frac{(A \times B)+C}{D} \tag{A.38}$$

where

- A is the total number of hours spent on producing bibliographic and authority records, and identifying and retrieving imported bibliographic data during the sample period;
- B is the cost per working hour (wages during the sample period divided by the regular working time of the relevant staff);
- C is the subcontract cost where cataloguing is outsourced;
- D is the number of titles catalogued during the sample period.

The product of A × B should be calculated for each staff member separately, then summed over all staff before adding C and dividing by D.

NOTE Other costs (buildings, operations, etc.) are specifically excluded in the calculation of this indicator to allow comparisons between different methods of producing bibliographic records.

A.4.1.3.5 Interpretation and use of results

The indicator is a real number with no top limit.

The staff costs of a catalogue entry can be affected by a number of factors, such as the different level of bibliographic description, the range and depth of authority control. The costs would be expected to reflect these differences.

The costs should be appraised in relation to the quality of the catalogue:

— effectiveness for users;

— effectiveness for staff (stock control and other internal functions);

— conformity to standards for exchange and communication.

The result should also be appraised in comparison with previous staff costs for the same library, or in comparison with other libraries.

If the costs per title catalogued seem too high, the library might:

— reconsider the level of description for specified groups of materials;

— look to technical aspects such as software and hardware performance;

— revise workflows;

— increase the amount of imported data by cooperation with other libraries in the country.

A.4.1.3.6 Source

See Reference [36].

A.4.1.3.7 Examples and further reading

The National Library of Spain tested this performance indicator in 2015 to assess effectivity in cataloguing modern monographs (see Reference [18]). The result was 8,99 € per title catalogued. Creating full bibliographic records, capturing authority records, subject analysis and indexing were included. The time for re-cataloguing bibliographic records was excluded. The time for creating or updating holding descriptions was excluded.

The National Library of Estonia tested the indicator in the end of 2016[19]. The staff costs per one national imprint document catalogued were 7,23 €. The documents included printed books, eBooks, non-musical sound recordings and videos, but no periodicals. The processes included cataloguing on national bibliography level, indexing and classifying. The creation of authority records was calculated separately on the basis of average anticipated time expenditure.

A.4.1.4 Staff costs per loan

A.4.1.4.1 Background

National libraries are increasingly required to demonstrate that they use their funds efficiently and offer services of high quality. In this context, cost analysis studies can help to assess the level of efficiency.

If the costs per unit of individual products and services are known, comparisons between services and benchmarking with other libraries is possible. Additionally, the staff will gain a better understanding of the cost implications of practices and policies.

Loans are taken as an example in this indicator as they generally occur in all libraries, and therefore, the results can be compared between libraries. As lending and delivery services constitute an important task of national libraries, the indicator may be used to assess the overall efficiency of the services.

In most cost studies about lending, interlibrary lending and document supply services, the direct costs were identified as those for staff, network and communication, delivery, photocopying and scanning, office supplies, equipment, software and maintenance. The findings of all these studies showed that the most important cost factor in all cases is the staff costs: they are usually around 60 % to 70 % of the total costs. Therefore, this indicator uses only staff costs for calculating the costs per loan.

A.4.1.4.2 Objective of the performance indicator

The performance indicator assesses the efficiency of the library's lending and delivery services.

The indicator is especially useful for comparing costs in a specific library over a number of years.

Comparison between libraries is possible if the different percentages of types of loan and delivery, and differences in salaries are considered.

A.4.1.4.3 Definition of the performance indicator

The performance indicator is the staff costs for library lending and delivery services during a full financial year divided by the total number of loans in the same period.

Loans for the purpose of this indicator include:

— local loans, including in-house loans;

— interlibrary loans;

— electronic document delivery transactions.

NOTE Renewals are excluded.

A.4.1.4.4 Method

The library fixes a period with normal activity for sampling.

To obtain the number of hours spent on local lending, interlibrary lending, and electronic document delivery, the staff members involved in these services note the time they spend on these tasks during

19) Not published.

the sample period, as employees are sometimes involved in several tasks. Thus, the proportion of time that every employee dedicates to lending and delivery services can be calculated. If time logging is not possible, this proportion may, instead, be estimated.

Calculate the staff costs per loan using Formula (A.39):

$$\frac{A \times B}{C} \tag{A.39}$$

where

- A is the total number of hours spent in local lending, interlibrary lending and electronic document delivery,
- B is the cost per hour of labour (wages divided by the regular working time of the relevant staff),
- C is the number of loans + interlibrary loans + electronic document deliveries during the sample period.

NOTE 1 For the purpose of this indicator, copies provided by the library as substitutes for loans are included.

NOTE 2 Retrieving items from the shelves and photocopying/scanning for the delivery are included in the working time.

NOTE 3 Outgoing interlibrary loans are included. Incoming interlibrary loans are excluded. It is important that the inclusions and exclusions are described when the indicator is used for comparing libraries.

NOTE 4 In certain cases, especially when a part of the activities has been outsourced, it can be useful to calculate staff costs separately for loans and for interlibrary loans plus document delivery.

A.4.1.4.5 Interpretation and use of the results

The indicator is a real number with no top limit. A low score is considered as good.

The indicator establishes the relationship between the number of loans and the staff costs of providing the lending and delivery services of the library. In the normal case, the indicator should not be interpreted as an estimate of the average costs of a loan transaction as all other costs are excluded.

The indicator can be influenced by the percentages of the different types of lending and delivery and by the differences of salaries between countries.

If the cost per loan seems too high, the library might:

— revise workflows;

— replace professional staff in certain services by non-professionals.

A.4.1.4.6 Source

See Reference [51], pp. 50-51 (restricted to local loan).

A.4.1.4.7 Examples and further reading

In 2000, the Australian National Resource Sharing Working Group with the assistance of the National Library of Australia conducted a comprehensive study for ILL/DD operations in Australian libraries. Ninety-seven libraries from all states and territories and sectors were surveyed, with eight state, territory and national libraries among them. The main performance measures used in this study were turnaround time, fill rate and unit cost for requesting activities and fill rate and unit cost for supplying ones. The findings showed the average total unit cost for the participating libraries was AUD 32,10 for requesting and AUD 17,03 for supplying. In the case of national/state libraries, on average, they had a significantly higher total unit cost for requesting, almost AUD 80; for requesting it was AUD 20,13.

Staff represented, on average, the largest proportion of the total unit cost of ILL/DD both for requesting (61,2 %) and for supplying (76,8 %) in all sectors. In the national/state libraries sector this proportion reached 74,9 % for requesting and 81,1 % for supplying (see Reference [66]).

Almost at the same time as the Australian project, the Performance of Interlending in Nordic Academic Libraries study aimed at improving the performance of interlibrary lending service in Nordic research libraries (see Reference [82]).

The study examined three issues: unit cost, fill rate and timeliness. Sixty-five libraries from Denmark, Sweden, Finland, Norway and Iceland took part in the project during 2000 and 2001. The average unit cost was 12,56 € for borrowing and 7,24 € for lending, with total costs for an interlibrary loan of 19,90 €. However, the unit costs differed between countries: for borrowing between 6,26 € and 26,03 €, and for lending between 2,47 € and 21,94 €. Staff costs were generally about two thirds of total costs, higher than the Australian percentage.

No example was found where the “cost per loan” was widened to include both loans and interlibrary loans + document deliveries.

A.4.1.5 Percentage of library means received by special grant or income generated

A.4.1.5.1 Background

In general, national libraries are mainly funded by the state. The budgets are calculated for the core tasks, but often are not sufficient for additional and/or new tasks. It is therefore important for national libraries to obtain additional financial resources, especially for projects that go beyond the main tasks. Such resources could be obtained via project grants, sponsoring, or income generated by the library.

The success in obtaining additional financial resources can be seen as an indicator for the initiative, renown and creativity of a national library.

A.4.1.5.2 Objective of the performance indicator

This performance indicator assesses the library’s success in obtaining additional financial resources and therewith its ability for development.

Comparison of results between libraries is possible if differences in the funding institutions are taken into account, and if the means are calculated in the same way.

A.4.1.5.3 Definition of the performance indicator

The performance indicator is the percentage of library means received by special grants or income generated.

Special grants in the sense of this indicator are grants of a non-recurrent nature to fund major projects, such as a cost analysis project or the test of a chat reference service. Continuous funding by external bodies for special tasks of the library (e.g. keeping a centre for library education) is not considered as a special grant, but is included in the overall library means.

Income generated by the library includes income from fees, charges, subscriptions, and donations, and income generated by special activities such as a library shop or advertisements.

A.4.1.5.4 Method

Determine the overall means of the library, including means for capital expenditure.

As subtotal, calculate the income generated by the library and special grants including those means for capital expenditure that were not paid by the funding bodies. Means obtained by special grants include funding in programmes for unemployed persons.

Calculate the percentage of library means received by special grant or income generated using Formula (A.40):

$$\frac{A}{B} \times 100 \tag{A.40}$$

where

A is the library means received by special grants and income generated,

B is the overall means of the library.

Round off to one decimal point.

A.4.1.5.5 Interpretation and use of results

The indicator is a real number between 0 and 100.

A higher score indicates that the library successfully acts on its own initiative to obtain additional means. In this case, the library is considered as ambitious and motivated.

The indicator also helps to gain knowledge about the extent to which the library is involved in tasks that go beyond the main mission of the library and therefore qualify for extra means.

The indicator can be influenced by the library's mission involving more or less research work for which more grants might be available and by legal restrictions for generating income. It could also be influenced by a decrease in means received by the funding bodies. Such a decrease would lead to an increase of this indicator even if the library's special grants and earnings remain constant.

A.4.1.5.6 Sources

See Reference [24], (PI 4.3) and Reference [71], pp. 246 – 249. (D.4).

A.4.1.5.7 Examples and further reading

The German benchmarking project BIX used this indicator for academic libraries. The results in 2015 showed that 5,4 % to 10,3 % of funds (varying as to types of libraries) were received by external funding, special grants, or income generated (see Reference [25]).

The National Library of Austria uses the indicator as described here. In 2015, income generated and sponsoring together came up to 8 % (see Reference [68]).

The German National Library counted for 2015 a total of 50 333 000 €, 1 310 000 € of which were income generated, plus an additional 923 000 € of project funding = 4,4 % (see Reference [37]).

The National Library of Estonia's overall income in 2015 was 6 445 403 €. Special grants amounted to 207 307 € excluding the continuous funding for the EU Information Centre and means for capital expenditure paid from the state budget. The income generated by the library was 586 003 € including income from the conference centre, income from rent and other services. The Percentage of Library Means Received by Special Grant or Income Generated in 2015 was: 793 310/6 445 403 × 100 = 12,3 %[20].

20) Not published.

A.4.2 Staff development

A.4.2.1 Number of attendance hours at formal training lessons per staff member

A.4.2.1.1 Background

Effective management and use of up-to-date technology are especially relevant for national libraries as their staff members often have to act as experts in different fields of librarianship. Therefore, to enlarge and to maintain staff competences will be even more important in national libraries than in other libraries.

The time spent on formal training for the staff can be seen as a measure of the library's ability to keep up with developments in different fields.

A.4.2.1.2 Objective of the performance indicator

This performance indicator assesses the improvement of library staff skills by attending training lessons and the priority the library gives to staff development.

Comparison between libraries is possible.

A.4.2.1.3 Definition of the performance indicator

A.4.2.1.3.1 This performance indicator is the number of attendance hours of staff members at formal training lessons divided by the total number of library staff (number of persons not FTEs = full-time equivalents).

NOTE Volunteers are excluded.

A.4.2.1.3.2 In the sense of this indicator formal training means pre-planned lessons in professional skills and competences including social skills.

NOTE 1 The training can be held in-house, externally or online and hosted by library staff or external experts.

NOTE 2 Informal training, such as point-of-use training, is excluded.

The indicator also assesses the number of attendances at training lessons.

A.4.2.1.4 Method

The number of attendance hours at formal training lessons is identified by keeping a record of library staff members attending these lessons and by counting the hours of duration of these lessons. This number is then divided by the total number of persons on the staff.

The number of attendance hours at formal training lessons per staff member can be calculated using Formula (A.41):

$$\frac{A}{B} \tag{A.41}$$

where

A is the number of attendance hours at formal training lessons during a specified time period,

B is the total number of library staff members at the end of that period.

Round off to the nearest integer.

A.4.2.1.5 Interpretation and use of the results

The indicator is a real number with no top limit. A higher number indicates an improvement of competence in terms of training attended. A lower number can indicate the need to promote staff training.

A high number of attendances at formal training lessons can however be the result of a few staff members attending many sessions. It is important for the managers to monitor the total number of different staff members who attend training.

The indicator does not include informal training and could therefore underestimate the amount of staff training.

The indicator is affected by the number of training lessons offered and by the quality of the training. The quality of the lessons should be monitored by satisfaction questionnaires and/or by tests that assess the learning outcome of the staff.

The indicator is also influenced by the introduction of new services during the reporting year requiring additional training.

In case of low attendance at training lessons, the library could promote the training lessons via its intranet or personal invitation and try to assess the employees' needs for specified training lessons.

A.4.2.1.6 Source

See Reference [17], p. 35 ("hours of formal information technology instruction per staff member").

A.4.2.1.7 Examples and further reading

The German benchmarking project BIX used the indicator "training days per staff member" for academic libraries. The results in 2015 showed an average of 3,4 to 5,5 days for different types of libraries (see Reference [25]).

The Austrian National Library uses the indicator as described in here. Staff members are calculated in FTE (not persons). In 2010, there were 8,8 hours of training per FTE, in 2015 19,3 hours, due to extensive RDA training (see Reference [68]).

The National Library of Finland gives statistical data for the number of training days per year, as well as for the number of staff. In 2015, there were 858 training days for 249 staff members = 3,45 days (see Reference [43]).

The National Library of Spain uses the indicator as described here. For 2014, the library reports 28,33 hours of training per staff member, for 2015 29,1 hours (see Reference [18], p. 41).

A.4.2.2 Percentage of staff time spent in training

A.4.2.2.1 Background

To enlarge and maintain staff competences is even more important in national libraries than in other libraries as their staff members often have to act as experts in different fields of librarianship.

The time spent on formal training for the staff can be seen as a measure of the library's ability to keep up with developments in different fields.

A.4.2.2.2 Objective of the performance indicator

The performance indicator assesses the percentage of staff time allocated to formal training activities for the purpose of enhancing staff skills.

Comparison between libraries is possible.

A.4.2.2.3 Definition of the performance indicator

This performance indicator is the proportion of total working hours the library invests in formal staff training as a percentage.

In the sense of this indicator, formal training means pre-planned lessons in professional skills and competences including social skills.

NOTE 1 The training can be held in-house, externally or online and hosted by library staff or external experts.

NOTE 2 Informal training, such as point-of-use training, is excluded.

A.4.2.2.4 Method

Count the number of hours that staff members spend on formal training. Training will usually occur during working hours, but training on weekends and free days shall also be counted if the training hours are interpreted as working time. Include the use of online training modules by library staff.

Count the working hours that are available during the reporting year, in theory (gross working hours including holidays and time of illness).

NOTE 1 Temporary staff and project staff are included.

NOTE 2 Volunteers and persons in janitorial services are excluded.

The percentage of staff time spent in training is calculated using Formula (A.42):

$$\frac{A}{B}\times 100 \qquad \text{(A.42)}$$

where

A is the total hours spent receiving formal staff training;

B is the total number of working hours available in the library.

Round off to one decimal point.

A.4.2.2.5 Interpretation and use of the results

The performance indicator is a real number in the range 0 to 100.

A higher percentage indicates an improvement of competence in terms of training attended. A lower percentage can indicate the need to promote staff training. Libraries should try to strike a balance in the proportions of time that staff spends in various activities.

A high percentage of staff time spent at formal training lessons may be the result of a few staff members attending many lessons. It is important for the managers to monitor the total number of different staff who attend training.

The performance indicator does not include informal training and could therefore underestimate the amount of staff training.

The performance indicator is affected by the number and length of training lessons offered and by the quality of the training. The quality of the lessons should be monitored by satisfaction questionnaires and/or by tests that assess the learning outcome of staff.

The performance indicator is also influenced by the introduction of new services during the reporting year that require additional training.

In case of low attendance at training lessons, the library could promote the training lessons via its intranet or personal invitation and try to assess the employees' needs for specified training lessons.

A.4.2.2.6 Source

See Reference [25].

A.4.2.2.7 Examples and further reading

The National Library of Finland gives statistical data for the number of training days per year, as well as for the number of staff members and the total working time. In 2015, there were 858 training days and 248,2 working years (see Reference [43]). As the normal working year (including holidays) is calculated as 252 working days, this would mean a total of 62 546,4 working days of which 858 training days are 1,37 %.

A.4.3 Cooperation

A.4.3.1 Percentage of staff in cooperative partnerships and projects

A.4.3.1.1 Background

National libraries are usually the principal agents promoting national and international cooperation of the library network. The investment of staff resources in cooperation and projects can therefore be seen as an indicator of the library's engagement in its national and international role.

A.4.3.1.2 Objective of the performance indicator

The performance indicator assesses the library's local, regional, national and international cooperation and therewith the library's importance in and impact on the library world.

Comparisons between libraries are possible if the different possibilities for project funding are taken into consideration.

A.4.3.1.3 Definition of the performance indicator

This performance indicator is the number of library staff (FTEs) in cooperative partnerships and projects divided by the total number of library staff (FTEs).

NOTE 1 A partnership is defined as an on-going, formalized cooperation between a library and one or more other organizations including other libraries, usually concerning particular services or activities.

NOTE 2 A project is defined as unique process consisting of a set of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including the constraints of time, cost and resources.

NOTE 3 Only institutionalized and/or especially funded cooperation initiatives and projects are considered for this indicator, such as working groups or committees established by library associations or projects funded by governmental or research organizations.

NOTE 4 As a subset, the percentage of staff engaged in international cooperation and projects could be assessed separately.

NOTE 5 International projects in the context of this indicator are those with at least one partner from outside the nation.

A.4.3.1.4 Method

The number of library staff (FTEs) in cooperative partnerships and projects is calculated by adding the time spent by all permanent and temporary staff including project staff, planning, maintaining and developing cooperation and working in cooperative partnerships and projects.

The number of staff members working on international partnerships and projects can also be counted separately.

Since many staff members contribute time to cooperation partnerships and projects, data should be collected by sampling. The staff is required to keep work diaries or time logs for a week, or for several representative days, and the amount of time spent on partnerships and projects is then calculated as a percentage of the total staff time worked during the sampling period.

If time logging is not possible, this proportion can instead be estimated.

The percentage of staff in cooperative partnerships and projects is calculates using Formula (A.43):

$$\frac{A}{B} \times 100 \tag{A.43}$$

where

A is the number of library staff (FTEs) planning, maintaining and developing-partnerships and projects;

B is the total number of library staff (FTEs).

Round off to one decimal place.

A.4.3.1.5 Interpretation and use of the results

The indicator is a real number between 0 and 100.

A high percentage is considered as good, as it shows the engagement and role of the national library in the information society.

The indicator results can vary greatly over years and can be influenced by the availability of funding for projects.

The indicator is especially useful if applied consequently over years.

A.4.3.1.6 Source

See ISO/TR 28118:2019, A.7.4[11].

A.4.3.1.7 Examples and further reading

The National Diet Library of Japan tested this indicator in the end of the fiscal year 2015 for international cooperation only and found a score of 2,0 %[21].

The National Library of Spain tested this indicator in 2014 and 2015. The results for 2014 showed that 15 % (2014) and 14 % (2015) of library staff (estimated FTEs) were involved in national and international cooperative partnerships and projects (see Reference [18]).

The Austrian National Library uses the indicator as described in ISO/TR 28118. In 2010, 6 % of the library staff worked in cooperative partnerships and projects, in 2015 only 3 % (see Reference [68]).

21) Not published.

Annex B
(informative)

Examples of impact surveys

B.1 General

This annex shows four examples of impact surveys for national libraries. The examples are prototypes, based on experiences in various projects.

The first survey addresses probably the most important user group in national libraries: researchers. The questions cover frequency and type of library use and the library's impact.

The second survey is intended for assessing the public opinion of the national library's value and impact.

The last two survey examples address user groups that are specific for the functions of national libraries: publishers and other libraries in the country that use the national library's services. In both of these examples, questions for satisfaction are added to the impact questions in order to show the interrelation between these topics.

The surveys show sets of questions that have proved effective in surveys of national libraries. The different situations, functions and user groups of national libraries and the specific goals of an impact assessment project might require changes and/or additional questions. The personal questions at the end of the survey should be adapted to the particular situation of the library.

B.2 Survey (questionnaire) for researchers

B.2.1 General

Researchers are defined here as all persons doing research, whether for academic, commercial or personal reasons; this includes students.

The survey can be handed out in print format to users during or after a library visit. It can also be presented as an online survey on the library's website after the use of library services.

B.2.2 Preface to the questionnaire

The survey should explain the purpose of the project to the participants. This could be done in the following way.

We want to know how important this library and its services are for your:

— learning and research;

— profession;

— vocational training;

— further education;

— personal life and well-being.

Your answer can help us to model and develop even better services for you. Answers are voluntary and anonymous. Thank you for your cooperation.

B.2.3 Questions about the frequency of library use

Question 1: On average, how often do you visit the library?

— several times per week;

— several times per month;

— less often;

— this is my first time.

Question 2: On average, how often do you use the library's online services via the Internet (e.g. electronic journals, online catalogue)?

— several times per week;

— several times per month;

— less often;

— this is my first time.

B.2.4 Questions about the types of library use

Question 1: What do you usually do when you visit the library?

(Check more than one box, if applicable)

— borrow or return books, audio-visual material, or other library resources;

— search the catalogues;

— use the reading-rooms;

— study/work in the library;

— use special collections (e.g. manuscripts, sheet music, archival material);

— take part in events/exhibitions (e.g. lectures, cinema shows, workshops);

— attend training programmes;

— turn to the staff for help, information or suggestions:

— other (please describe).

Question 2: Which library services do you use online?

(Check more than one box, if applicable)

— online catalogues;

— the library's electronic collection;

— the library's website;

— online reference;

— check my account, renew loans;

— other (please describe).

B.2.5 Questions about impact

Question 1: To what extent do you agree to the following:

(5 = I completely agree; 4 = I mostly agree; 3 = Neutral; 2 = I mostly disagree; 1 = I completely disagree)

	5	4	3	2	1	not applicable
1. The library helps me to stay informed of the topics that interest me.	o	o	o	o	o	o
2. I have got new ideas, new interests by using the library's collections and services.	o	o	o	o	o	o
3. I got helpful information for studying/learning.	o	o	o	o	o	o
4. The library has supported me in my research projects and publications.	o	o	o	o	o	o
5. I got essential information that could be found nowhere else.	o	o	o	o	o	o
6. The library helped me in my profession.	o	o	o	o	o	o
7. The library helped me to save time.	o	o	o	o	o	o
8. I made contacts with other researchers working on my topics.	o	o	o	o	o	o
9. Without this library, the conditions for my research would be much less convenient.	o	o	o	o	o	o

Question 2: If this library did not exist, do you think you could get the same services/information elsewhere?

— yes;

— yes, but it would take more time and effort;

— yes, but only partially;

— no;

— don't know.

B.2.6 Questions about personal data

Question 1: What is your age group?

— under 25

— 25 to 39

— 40 to 59

— 60 or over

Question 2: Are you

— male

— female

Question 3: What is your status?

— undergraduate student;

— postgraduate student;

— academic researcher;

— other.

Question 4: What subject best expresses your main study/research topic?

(A list of subjects should be added to the question.)

B.3 Survey (questionnaire) for the general public

B.3.1 General

This survey questions a sample of the population in the country, including actual users and non-users of the library. It is intended to show the general public's awareness and perceptions of the national library, its functions and services and its influence on the cultural, political and social life in the country.

The questions could be done by phone or mail, or by interviewing a random sample of persons in specific localities or situations, such as in trains and buses or in frequented parts of a community ("street survey").

B.3.2 Questions about awareness of the library

The place of residence of respondents will probably influence the awareness of the national library's functions.

Question 1: Have you already heard of the national library?

— yes

— no

Question 2: If yes, where did you hear of the library?

(Check more than one box, if applicable)

— through the media (newspapers, radio, television)

— on the Internet (e.g. by search engines);

— by word of mouth (e.g. from friends or colleagues);

— at work;

— via events and exhibitions;

— at school or university;

— other (please explain).

Question 3: Have you ever visited the national library or used its onsite or digital services?

— yes

— no

Question 4: If yes, what services did you use?

(Check more than one box, if applicable)

— to borrow books or other materials;

— to consult books or other materials in the library;

— to use the electronic collection;

— to get information via the reference service;

— to attend training lessons;

— to attend exhibitions and other events;

— other (please explain)

B.3.3 Questions about the library's functions

Question 1: How would you characterize the national library?

(Check more than one box, if applicable)

— the biggest library in the country;

— the organizer of the country's library system;

— a huge collection of old books and manuscripts;

— the custodian of the country's documentary heritage;

— a centre of national culture with exhibitions, events and meetings.

Question 2: Which of these tasks would you associate with the national library?

(Check more than one box, if applicable)

— to collect and preserve important publications in the national language/s;

— to collect and preserve all publications in the national language/s;

— to collect publications on the national history;

— to collect academic literature;

— to edit a bibliography of publications in the national language/s;

— to lend books;

— to promote reading;

— to digitize print publications;

— to organize exhibitions and events about national topics.

Question 3: What kind of people do you suppose to be users of the national library?

(Check more than one box, if applicable)

— school classes;

— teachers, educators;

— researchers;

— students;

— genealogists;

— librarians.

B.3.4 Questions about the library's value and impact

Question 1: Where do you see the value of the national library for the cultural and social life of the country?

(Check more than one box, if applicable)

The national library:

— supports anyone who wants to learn;

— is a creator of new knowledge;

— preserves the country's cultural heritage for future generations;

— supports equal access to information by giving general access to the national collections;

— offers educational activities for children and adults by exhibitions and events and on Internet platforms;

— is a symbol for the national culture.

B.3.5 Questions about personal data

Question 1: What is your age group?

— under 25

— 25 to 39

— 40 to 59

— 60 or over

Question 2: Are you

— male

— female

Question 3: What is your status?

— high-school student, trainee

— college or university student

— employee

— freelance

— unemployed

— retired

— other (please specify)

B.4 Survey (questionnaire) for libraries

B.4.1 General

The survey is intended for an environment of national libraries that play a leading role in the library and information world of the country.

The national library should choose a sample of academic and/or public libraries that have already used its services. The survey could be sent to the libraries in print or electronic format. The questions can also be done in telephone interviews.

The survey asks on the one side for the satisfaction of the interviewees with the national library's procedures and services, on the other side for an estimate of the national library's value for the library and information world and for possible impact of the national library's services on the individual library's activities and success.

B.4.2 Preface to the questionnaire

The survey should explain the purpose of the questions to the participating libraries. This could be done in the following way:

Your library has already cooperated with the national library. In order to organize all procedures of this cooperation as efficiently and conveniently as possible, we want to know:

— which services you have already used;

— whether you are satisfied with the national library's services;

— whether and how the national library's services influence your own planning, activities and success;

— how you rate the importance of the national library for the national library and information world.

Thank you for your cooperation.

B.4.3 Questions about the services of the national library

Question 1: How satisfied are you with the following services of the national library?

(5= very satisfied, 4 = fairly satisfied, 3 = neither, 2 = fairly dissatisfied, 1 = very dissatisfied)

	5	4	3	2	1	not used as yet	not applicable
Cataloguing and metadata services							
National bibliography							
Reference and information services							
Loans out of the national library's collection							
Printing and copying services							
Microfilming services							
Cooperation in exhibitions and events							
Centre for international standard numbers							
National digital library							

Question 2: If you answered "fairly dissatisfied" or "very dissatisfied" to any of the above, what are your reasons?

B.4.4 Questions about the value of the national library and its services

Question 1: To what extent do you agree to the following?

(5 = I completely agree; 4 = I mostly agree; 3 = neither; 2 = I mostly disagree; 1 = I completely disagree)

	5	4	3	2	1	not applicable
The services of the national library help us to save time.	o	o	o	o	o	o
The services of the national library help us to save staff costs.	o	o	o	o	o	o
The quality of the national catalogues and bibliographies gains considerably by the national library's cataloguing services.	o	o	o	o	o	o
The currency of the national catalogues and bibliographies gains considerably by the national library's cataloguing services.	o	o	o	o	o	o
By relying on the national library's collecting the national imprint our library saves storage space.	o	o	o	o	o	o
By relying on the national library's preserving the national imprint our library saves preservation effort.	o	o	o	o	o	o
The national library is essential for making the national imprint long-term accessible.	o	o	o	o	o	o
Our library has highly profited from the methodical instruments developed by the national library.	o	o	o	o	o	o
The national library provides a centre for the national library and information world.	o	o	o	o	o	o
The existence of the national library with its mission of preserving the national documentary heritage gives a feeling of reliance and security to other libraries.	o	o	o	o	o	o

B.5 Survey (questionnaire) for publishers

B.5.1 General

The survey is intended for publishers that are legally obligated to deliver their publications to the national library. This includes commercial publishers, but also non-commercial institutions, societies or private persons that publish documents.

The library should choose a sample of publishers that have already been in contact with the national library. The survey could be sent to them in print or electronic format. The questions can also be done in telephone interviews.

The survey asks on the one side for the satisfaction of the publishers with the library's procedures and services, and on the other side for possible impact of the library on the publishers' activities and success.

B.5.2 Preface to the questionnaire

The survey should explain the purpose of the questions to the participants. This could be done in the following way.

The legal deposit regulations of this country commit the national library to collect and to preserve the country's heritage of publications and all publishers in this country to deliver a copy of each publication to the national library. You have already been in contact with the national library in the context of the legal deposit.

In order to organize all procedures of this cooperative task as efficiently and conveniently as possible, we want to know:

— how you rate the procedures of legal deposit;

— whether you are satisfied with the national library's services;

— whether and how the legal deposit system and the national library's services influence your publishing activities.

Answers are voluntary and anonymous. Thank you for your cooperation.

B.5.3 Questions about the legal deposit procedures

Question 1: Have you already sent publications to the national library as legal deposit?

— yes

— no

Question 2: Do you know what procedure to follow for depositing publications?

— yes

— no

Question 3: Are you familiar with the legal deposit system?

(4 = quite familiar; 3 = somewhat familiar; 2 = a little; 1 = not at all)

Question 4: What could be improved/changed in the procedures that you know?

(Check more than one box, if applicable)

— The scope of publications to be deposited could be better defined.

— The deposit procedure could be simplified.

— The number of copies to be deposited could be reduced,

— The sending of publications should be free of charge.

— The possibility of compensation for deposited publications should be better explained.

B.5.4 Questions about services of the library

Question 1: How satisfied are you with the following services of the national library?

(5= very satisfied, 4 = fairly satisfied, 3 = neither, 2 = fairly dissatisfied, 1 = very dissatisfied)

	5	4	3	2	1	not used as yet
Services for international numbers (ISBN, ISSN, ISMN)						
Cataloguing in publication						
National bibliography						
Reference and information services						
Printing and copying services						
Copyright information						

Question 2: If you answered “fairly dissatisfied” or “very dissatisfied” to any of the above, what are your reasons?

B.5.5 Questions about the value of the national library and its services

Question 1: To what extent do you agree to the following?

(5 = I completely agree; 4 = I mostly agree; 3 = neither; 2 = I mostly disagree; 1 = I completely disagree)

	5	4	3	2	1	not applicable
The cataloguing services of the national library help me to save time.	o	o	o	o	o	o
The cataloguing services of the national library help me to save staff costs.	o	o	o	o	o	o
The quality of the national catalogues and bibliographies gains considerably by the national library’s cataloguing services.	o	o	o	o	o	o
The national bibliography is important for promoting our publications.	o	o	o	o	o	o
The national library is essential for making our publications long-term accessible.	o	o	o	o	o	o
The reliance on our publications being collected and preserved by the national library saves costs for archives and effort for preservation.	o	o	o	o	o	o

Question 2: Without the national library, do you think you could get the same services elsewhere?

— yes

— yes, but it would involve more costs and time

— yes, but only partially

— no

— I don’t know

Annex C
(informative)

Performance indicators in the structure of the balanced scorecard

The numbers following the indicator names refer to Annex A.

1 Resources, Access, and Infrastructure

Indicators that measure the comprehensiveness, integrity and availability of library resources and services (e.g., collections, catalogues).

1.1 Collection

Percentage of National Publications Acquired by the National Library	A.1.1.1
Percentage of Required National Imprint Titles in the Collection	A.1.1.2
Coverage of the National Imprint in the New Entries of the National Bibliography	A.1.2.1
Number of Documents Digitized per 1,000 Documents in the Collection	A.1.3.1
Percentage of Documents Digitized per Special Collection	A.1.3.2

1.2 Access

Shelving Accuracy	A.2.2.1
Direct Access from the Homepage	A.2.2.2
Percentage of Rare Materials Accessible via Web Catalogues	A.1.2.2
Percentage of the Collection in Stable Condition	A.1.4.1
Percentage of Rare Materials Needing Conservation/Restoration Treatment that Received Such Treatment	A.1.4.2

1.3 Facilities

Percentage of Storage Space which has an Appropriate Environment	A.1.4.3

2 Use

Indicators that measure the usage of library resources and services (e.g., loans, accesses, and facilities use).

2.1 Collection

Usage of Foreign Publications Acquired during the last 3 Years	A.1.1.3
Number of Content Units Accessed per Document Digitized	A.1.3.3

2.2 Access

Percentage of Accesses to the Online Catalogue via Mobile Devices	A.2.2.3
Number of Attendances per Event	A.3.1.1

2.3 Facilities

User Places Occupancy Rate	A.2.4.1

2.4 General

User Satisfaction	A.2.1.1
Willingness to Return	A.2.3.3

3 Efficiency

Indicators that measure resource and service efficiency (e.g., costs per loan or title catalogued; time required to lend or process documents; and correct answer fill rate).

3.2 Access

Median Time of Document Processing	A.1.2.3
Speed of Reference Transactions	A.2.3.2
Speed of Interlibrary Lending	A.2.2.5
Median Time of Document Retrieval from Closed Stacks	A.2.2.4

3.3 Staff

Correct Answer Fill Rate	A.2.3.1
Employee Productivity in Document Processing	A.4.1.1
Employee Productivity in Lending and Delivery Services	A.4.1.2
Staff Costs per Title Catalogued	A.4.1.3
Staff Costs per Loan	A.4.1.4

4 Potentials & Development

Indicators that measure the library's input into training and emerging service areas and its ability to gain sufficient funding for development (e.g., attendances at training lessons by staff or staff in cooperation and projects).

4.2 Staff

Number of Research Publications per Professional Staff Member	A.3.3.1
Number of Attendance Hours at Formal Training Lessons per Staff Member	A.4.2.1
Percentage of Staff Time Spent in Training	A.4.2.2
Percentage of Staff in National and International Cooperation and Projects	A.4.3.1
Percentage of Staff Time Spent on Educational Services	A.3.2.1

4.3 General

Percentage of Library Means Received by Special Grant or Income Generated	A.4.1.5
Number of Documents in the Media per Event	A.3.1.2

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