# INTERNATIONAL STANDARD

# ISO
# 11620

First edition
1998-03-15

## Information and documentation — Library performance indicators

*Information et documentation — Indicateurs de performance des bibliothèques*

# Contents

**Annexes**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 11620:1998
https://standards.iteh.ai/catalog/standards/sist/858fbf05-ae09-43a3-93b7-
e3abf855f649/iso-11620-1998

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

iTeh STANDARD PREVIEW

International Standard ISO 11620 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 8, *Statistics and performance evaluation*.

ISO 11620:1998

Annexes A and B form an integral part of this International Standard. Annex C is for information only.

# Introduction

This International Standard is concerned with the evaluation of libraries of all types.

The main purpose of this International Standard is to endorse the use of performance indicators in libraries and to spread knowledge about how performance measurement can be carried out.

This international library community has expressed its commitment to the development of an International Standard for library performance indicators. By the establishment of this International Standard, the use of performance indicators can be advanced and libraries in developing and developed countries will benefit from the knowledge and skills associated with formal planning procedures and data collection processes.

This International Standard specifies the requirements of a performance indicator for libraries and establishes a set of indicators to be used by libraries of all types. It also gives guidance on how to implement performance indicators in libraries where such indicators are not already in use.

The quality of library services is related to the broader topic of quality management and quality assurance. This International Standard acknowledges and supports ISO 9004-2.

This International Standard provides a standardized terminology and concise definitions of the performance indicators. Furthermore, this International Standard contains concise descriptions of the indicators and of the collection and the analysis of data needed. Detailed information concerning methodology and analysis is provided in the publications listed in annex C.

Every indicator in this International Standard is given a unique name. This name sometimes differs from the literature upon which its description is based. Such differences are documented in the descriptions of the indicators.

The performance indicators included in this International Standard are either in widespread use or well documented in the literature. Some of the descriptions of indicators incorporate modifications of indicators described elsewhere: these reflect practical experience or the need to generalize. Input and resource based ratios are very well documented in the literature and provide a context for library performance indicators as defined in this International Standard.

There are some library activities and services for which, during the development of this International Standard, there was a general lack of tested and well-documented indicators. These include information services, user training and electronic services generally. (A recent publication is

listed in annex C, No. 26.) The library and information community is encouraged to establish mechanisms and to give a high priority to developing relevant indicators. This International Standard will be maintained by a Working Group which will monitor developments and incorporate additional indicators as they are tested and validated.

iTeh STANDARD PREVIEW

(standards.iteh.ai)

ISO 11620:1998
https://standards.iteh.ai/catalog/standards/sist/858fbf05-ae09-43a3-93b7-
e3abf855f649/iso-11620-1998

# Information and documentation — Library performance indicators

## 1 Scope

This International Standard is applicable to all types of libraries in all countries. Limitations on the applicability of individual performance indicators are listed in the scope clause of the description of each indicator (see annex B).

Indicators may be used for comparison over time within the same library. Comparisons between libraries may also be made, but only with extreme caution, taking into account any differences in the constituencies of the libraries, with good understanding of the indicators used, and careful interpretation of the data (see 5.3.5).

This International Standard does not include indicators for the evaluation of the impact of libraries either on individuals or on society.

Performance indicators are not specified for all services, activities and uses of the resources of the library, either because such indicators had not been proposed and tested at the time of formulation of this International Standard, or because they did not fulfil the criteria specified (see 4.2).

This International Standard is not intended to exclude the use of performance indicators not specified in it (see clause 6).

Throughout the text, the names of indicators are printed with initial capitals for significant words, e.g. Library Visits per Capita. This helps to distinguish the names from supporting text.

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2789:1991, *Information and documentation — International library statistics*.[1]

---

[1] The main purpose of ISO 2789 is to facilitate comparisons between libraries, and between libraries of different countries. It is not focused on performance indicators or how best to collect data to produce those performance indicators. A new edition is in preparation.

## 3 Definitions

For the purposes of this International Standard, the following definitions apply.

NOTES

1 Where appropriate, existing definitions, to the sources of which reference is made, have been used.

2 Terms defined are listed alphabetically in the English and French texts. The equivalent English or French terms, as appropriate, have, therefore, been placed in parentheses to facilitate cross-referencing.

**3.1 accessibility**: Ease of reaching and using a service or facility.
(French term: accessibilité)

**3.2 appropriateness**: Suitability of any given indicator for evaluating a specific activity.
(French term: adéquation)

**3.3 availability**: Degree to which documents, facilities or services are actually provided by the library at the time required by users.
(French term: disponibilité)

**3.4 document**: Recorded information which can be treated as a unit in a documentation process regardless of its physical form and characteristics.
[ISO 2789]
(French term: document)

**3.5 effectiveness**: Measure of the degree to which given objectives are realized.
(French term: efficacité)

NOTE — An activity is effective if it maximizes the results it was set up to produce.

**3.6 efficiency**: Measure of the utilization of resources to realize a given objective.
(French term: efficience)

NOTE — An activity is efficient if it minimizes the use of resources, or produces better performance with the same resources.

**3.7 evaluation**: Process of estimating the effectiveness, efficiency, utility and relevance of a service or facility.
(French term: évaluation)

**3.8 facilities**: Equipment, study places, etc. provided for library users.
(French term: installations)

NOTE — Includes photocopiers, online terminals, CD-ROM workstations, seats for reading and study carrels, but excludes toilets, cafes and public telephones.

**3.9 goal**: Desired state of affairs to be achieved by the implementation of agreed policies.
(French term: objectif général)

**3.10 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.
(French term: indicateur)

**3.11 library**: Organization, or part of an organization, the main aim of which is to maintain a collection of documents and to facilitate, by the services of staff, the use of such documents as are required to meet the information, research, educational or recreational needs of its users.
(French term: bibliothèque)
[adapted from ISO 2789]

NOTES

1 These are only the minimum requirements for a library and do not exclude any additional documents and services. [ISO 2789]

2 The documents (materials) may be of the traditional type, i.e. available as physical objects, or accessible in their electronic forms. Libraries may also extend their services to include making available materials outside their own collection.

**3.12 Loan**: Lending transaction of a document, to be used for a defined period of time, to a user directly or from one institution to another.
(French term: prêt)
[adapted from ISO 2789]

NOTE — All loans registered for use are included. Interlibrary loans are included. Renewals are included.

**3.13 mission**: Statement approved by the authorities formulating the organization's goals and its choices in services and products development.
(French term: mission)

**3.14 objective**: Specific target for an activity to be attained as a contribution to achieving the goal of an organization.
(French term: objectif opérationnel)

**3.15 performance**: Effectiveness of the provision of services by the library and the efficiency of the allocation and use of resources in providing services.
(French term: performance)

**3.16 performance indicator**: Numerical, symbolic or verbal expression, derived from library statistics and data used to characterize the performance of a library.
(French term: indicateur de performance)

NOTE — Includes both simple counts and ratios between counts as long as they are used to characterize the performance of a library.

**3.17 population to be served**: Individuals for whom the library is set up to provide its services and materials.
(French term: population à desservir)

**3.18 quality**: Totality of features and characteristics of a product or service that bear on the library's ability to satisfy stated or implied needs.
(ISO 8402, [1] in annex C)
(French term: qualité)

**3.19 recurrent expenditure**: Money spent on staff, and on resources which are used and replaced regularly, excluding capital expenditure such as main capital items, new buildings, extensions or modifications to existing buildings and computer equipment.
(French term: dépense ordinaire)

NOTE — Recurrent expenditure is calculated in various ways in different institutions, authorities and countries, and it does not seem possible to prescribe only one way of doing it. Calculation will have to be done according to normal practice in the context where this measure is applied. This also means that comparisons are only valid, when calculations are done according to the same principles.

Recurrent expenditure normally includes: salaries and wages (including employee benefits, social costs etc.), costs of acquiring documents for the collection, administrative costs, maintenance of buildings, collections etc., rental costs or depreciation costs of buildings and equipment, and other operating expenses (heating, lighting, electricity, etc.).

Value added taxes, sales and service taxes or other local taxes are normally included, unless an indicator is used for international comparisons.

**3.20 reliability**: Degree to which a measure repeatedly and consistently produces the same result.
(French term: fiabilité)

**3.21 resources**: Assets of the library including staff, materials, equipment, space, etc.
(French term: ressources)

**3.22 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.
(French term: population-cible)

**title**: Word or phrase, usually appearing on a document, by which it is convenient to refer to it, which may be used to identify it, and which often (although not invariably) distinguishes it from another document.
[ISO 2789]
(French term: titre)

NOTE —   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.

**3.24 user**: Recipient of library services.
(French term: usager)

**3.25 validity**: Degree to which an indicator actually measures what it is intended to measure.
(French term: validité)

## 4   Criteria and descriptive framework

### 4.1   Introduction

**4.1.1**   The purpose of library performance indicators is to function as tools to assess the quality and effectiveness of services provided by a library and of other activities undertaken by a library, and to assess the efficiency of resources allocated by the library to such services and other activities.

**4.1.2**   Annex B of this International Standard presents a set of performance indicators that have been thoroughly tested by widespread use in libraries or by explicit testing by researchers and subsequent documentation in the literature. Some descriptions of indicators include  modifications which reflect practical experience, or the need to generalize the indicators for general application.

**4.1.3**   All performance indicators included in annex B fulfil the criteria presented in 4.2 and are specified according to the descriptive framework presented in 4.3. Performance indicators to be added in revisions of this International Standard will have to fulfil the same criteria and follow the same descriptive framework.

**4.1.4**   New or alternative performance indicators may be developed in order to cover other activities and services or to serve a specific purpose. It is recommended that such performance indicators be evaluated and described according to 4.2 and 4.3 (see also clause 6).

NOTE —   Care has been taken to describe the indicators individually, independent of other indicators. This does not imply that the indicators should be used in isolation. When collecting data, it will in many cases be possible and practical to collect data for two or more indicators at the same time, as is shown in most manuals.

### 4.2  Criteria

**4.2.1**   In order to comply with this International Standard, a library performance indicator has to be thoroughly tested, validated and (preferably) documented in the literature. Performance indicators that are in widespread use in libraries may be accepted although they have not been explicitly documented.

**4.2.2**   In testing the performance indicator the following criteria should be used:

a)   **Informative content.** The indicator has to 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, e.g. goalsetting, budget
**3.23**allocation, prioritizing services and activities, etc.

**4**

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

NOTE —   The fact that an indicator reflects the underlying variability of the data, such as seasonal variations or fluctuations in loan activities does not in itself mean that the indicator is not reliable.

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

NOTE —   The fact 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 the purpose to which it is to be put. 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, etc.

e) **Practicality.** The indicator has to be practical in the sense that it uses data that can be made available by the library with a reasonable amount of effort in terms of staff time, staff qualifications, operational costs and user's time and patience.

If the indicator is intended for comparisons between libraries, a sixth criterion [item f)] 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 (see also 5.3.5).

NOTES

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

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.

## 4.3   Descriptive framework

### 4.3.1   Introduction

The performance indicators included in annex B are described according to the following framework, which should also be used in developing descriptions of new or alternative performance indicators.

### 4.3.2   Name

Each indicator shall have a unique, descriptive name.

### 4.3.3   Objective

Each indicator shall have an explicit objective, stated in terms of the service(s), activity(ies) or use(s) of resources to be evaluated.

### 4.3.4   Scope

The scope shall state the types of libraries to which the indicator can be applied.

The scope may state whether the indicator is suitable for comparison between libraries and whether there are any limitations concerning comparability.

The scope may include other limitations in the application of the indicator.

NOTE —   The scope statement may include qualifications, instances and situations to show how the indicator may be applied. For example, the scope may state whether the indicator is only suitable for certain parts of the collection such as the loan

collection or the reference collection; or whether the indicator can be used both for the library service or activity as a whole, and for parts of the library service, or for showing differences between subjects or parts of the population served.

### 4.3.5 Definition of the indicator

Each indicator shall be defined uniquely in terms of the data to be collected and/or the relationship to be established between the data.

This statement should also include definitions of special terms used in the definition of the indicator, that are not defined elsewhere in this International Standard, as well as terms used in the description of the method(s) to be used.

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

### 4.3.6 Method

The data to be collected and the calculations to be performed shall be described concisely.

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

Two or more equivalent methods may be described, i.e. different data and calculations used to produce the same indicator.

NOTE — Examples of this are using total count versus sampling, and using a direct measure versus an estimate based on different data.

If more than one method is described, the one most generally applicable shall be described first.

The descriptions supplied shall not include general statistical methodology such as sampling procedures, sampling sizes, estimates of confidence intervals, statistical tests, etc.

If a questionnaire is to be used, only the question(s) to be asked and the score used is included, not a detailed description of the total questionnaire design.

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

### 4.3.7 Interpretation and factors affecting the indicator

The interpretation statement may include information necessary to interpret the results of using the indicator.

NOTE — The total range of the indicator may be given, as well as a statement telling the user of this International Standard if a maximum, a minimum or an optimal value represent the state valued the most. In most cases information about the ranges normally found in libraries are not available at the present time. Such information may be added as and when it becomes available.

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

This statement may also include information about factors internal or external to the library that will affect the results, in order to help using the performance indicator as a diagnostic tool. This information should be provided in such a way that it is possible to see what actions taken by a library can contribute to a desired change in the score.

### 4.3.8 Sources (optional)

References may be supplied to document the source of the indicator. The description should state clearly whether the indicator as described in this International Standard is a modified revision 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.

The references may include documents supplying more detailed information about the use of the indicator, methods of data collection and analysis, etc.

### 4.3.9  Related indicators (optional)

Where appropriate, there should be a statement of the relationship of the indicator to other indicators within this International Standard.

## 5  Uses of performance indicators

### 5.1  Background

**5.1.1**  The performance indicators described in this International Standard can be used effectively in the  evaluation of libraries. In this process, the quality and effectiveness of the services and other activities of the library, as well as the efficiency of the uses of the resources of the library, are evaluated against the mission, goals and objectives of the library itself.

**5.1.2**  Performance indicators should be linked to systematic library planning and evaluation. Furthermore, measurement and evaluation processes should take place regularly. The results should be reported in a way that informs the decision-making processes and demonstrates how the library fulfils its mission.

**5.1.3**  As a library planning and evaluation tool, performance indicators have two principal objectives. One is to facilitate control in the management process, the other is to serve as a basis for reference and for dialogues between library staff, funding bodies and the user community.

A secondary objective is to serve in comparative analysis of the performance of libraries and information services which have equivalent missions or objectives.

**5.1.4**  In recent years, libraries have been using a wide variety of performance indicators for this purpose. Several indicators are being used extensively and thus represent an established practice. Recent years have also seen attempts to consolidate previous research efforts in this field, and both have contributed to attain consensus among practitioners on a set of performance indicators and how to implement them in the day-to-day life of the library.

NOTE — Significant contributions have been made at the national level in the form of published manuals and other compilations, listed in annex C [3, 4, 6, 7, 18, 19, 20, 25, 27], some of which have been translated and adapted by other countries. At the international level, important work has been carried out by UNESCO, which has supported the development of performance indicators for public libraries ([5] in annex C), and by IFLA, whose section for University Libraries and other General Research Libraries has produced a set of guidelines for measurement of performance in academic libraries ([8] in annex C). A comprehensive review and compilation ([24] in annex C) has been published under the auspices of the European Commission. These and related works provide important information on how to develop, use and interpret library performance indicators.

### 5.2  Selection of performance indicators

**5.2.1**  The performance indicators included in this International Standard are those seen to be most useful for libraries in general. This International Standard recognizes that there are many different types of libraries, in different settings, serving different user groups, and having a range of unique characteristics (structure, funding, governance, etc.). Since there is such a wide variation around the world it is important to understand that not all established performance indicators are useful to all libraries. The list of performance indicators that is included in this International Standard is best seen as a menu of possible performance indicators that could be used in a range of library settings.

**5.2.2**  Libraries, in consultation with their host institutions and relevant authorities, such as local and 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 must be made in the light of the mission, goals and objectives of the library. For example, the assessment of publicly funded libraries takes place in the context of the development of public policy.

It is desirable that all interested parties should be in agreement on the appropriateness of the performance indicators used.

**5.2.3** In order to find out which performance indicators are most appropriate for a particular library, to collect and analyze the data, and to interpret findings into a management strategy, a range of staff skills will be necessary. Some libraries will find it important and necessary to engage in staff training and development of educational skills prior to implementing performance indicators.

**5.2.4** In selecting performance indicators for use in a particular library setting, the following factors should be considered:

a) Will the performance indicator assist the management of the library, the funding body and the population to be served?

b) Does the librarian have some knowledge that a particular activity or area may not be operating as well as it could?

Even if this is only an intuitive feeling of the librarian, this could be a very good reason to use a performance indicator to find out whether there is a problem.

c) What level of effort can the library staff commit to the collection and analysis of the data to produce the performance indicators?

To produce performance indicators requires staff time and resources. Adequate staff time and resources should be made available to produce a particular performance indicator.

Staff will need to have practical knowledge of a range of statistical procedures.

d) Does any external authority require data to be reported on particular library service areas?

If yes, it is necessary to decide whether the same data can also be used to produce library performance indicators.

Local factors important to the library can affect the selection of performance indicators. The librarian must make a conscious decision in selecting the performance indicators that will be of most use in assessing the operation of the library in relation to its goals and objectives.

## 5.3 Limitations

### 5.3.1 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 a high expenditure per user. The scores on performance indicators must be interpreted in the light of what the library intends to accomplish, and not simply in terms of optimizing scores on particular indicators.

### 5.3.2 Degree of accuracy

Care should be taken with the interpretation of results. Lack of precision may occur due to sampling errors, or to subjective aspects of the measuring process or to inadequate time or resources for the measuring process (e.g. indicators B.1.11 and B.2.6.1). It can also imply that the indicators are inherently imprecise (e.g. B.2.1.3 and B.2.2.5).

NOTE — In some cases, a rough estimate is sufficient and to aim at more precision would be a waste of effort.

### 5.3.3  User skills versus library performance

To some extent, library performance indicators are affected by how well the user conducts various transactions with the library. For example, user satisfaction with the availability of materials may be extremely low at one library. This could indicate several things, one being that patrons lack adequate knowledge of how to locate materials in that particular library, or that the library has insufficient documents to meet demand. Thus, a low score suggests an area needing review. The review may suggest a need for strategies to improve user knowledge and skills related to library activities; or it may suggest a need to improve the availability of books by changing loan periods or buying additional copies.

### 5.3.4  Linking resources to services

While poor performance may seem to indicate that additional resources may be required to improve library services, this is not necessarily true. In fact, there may not be a strong correlation between resources and the quality of library services provided. The range of staff skills, management approaches, and a variety of other factors, including increased resources, may have different effects on increasing the quality of services at different libraries.

### 5.3.5  Comparability of performance indicator data

A primary purpose of using library performance indicators is self-diagnosis. This may include comparisons of 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 can assist in that process. However, such comparisons shall always be made with respect for each library's

a)   mission, goals, and objectives;

b)   performance on a range of performance indicators;

c)   resources;

d)   user groups;

e)   governance structure;

f)   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 [see also 4.2.2 f)].

## 6  Maintenance of this International Standard

A group operating under the auspices of ISO/TC 46/SC 8 is responsible for maintaining this International Standard. Newly developed indicators are vetted by an appointed group of experts and descriptions are published as amendments to this International Standard as rapidly as possible after ballot submitted to the national committees.