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Systems and software engineering — Information technology project performance benchmarking framework —

Part 3: Guidance for reporting

Ingénierie des systèmes et du logiciel — Cadre de conduite de tests de performance de projet de technologies de l'information —

Partie 3: Directives de rapport

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/IEC JTC1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

ISO/IEC 29155 consists of the following parts, under the general title *Systems and software engineering — Information technology project performance benchmarking framework*:

— *Part 1: Concepts and definitions*

— *Part 2: Requirements for benchmarking*

— *Part 3: Guidance for reporting*

— *Part 4: Guidance for data collection and maintenance*

Further parts might follow.

Annex A of this part of ISO/IEC 29155 is for information only.

Introduction

Benchmarking is an activity of comparing objects of interest to each other or against a benchmark to evaluate characteristic(s). In the context of the ISO/IEC 29155 series, the "object of interest" is the performance of information technology (IT) project, and the characteristic is a particular aspect of an IT project such as productivity.

The benchmarking is one of the fastest-growing techniques in the area of IT project management. Instances of IT project performance benchmarking are initiated and conducted for various reasons. Among the most common reasons are

a) the need to compare project productivity between similar industries,

b) the need to compare productivity between different project types and technologies,

c) the need to find the most effective targets for IT development process improvement,

d) the need to compare productivity between different suppliers,

e) the need to improve project management maturity,

f) the need to improve project estimation capability.

Much has been written regarding the trials of establishing IT project performance benchmarking, and statistics bear witness to the high failure rate of measurement and benchmarking programs. The most probable causes for failure have been disappointment in the benchmarking outcomes due to a lack of alignment between the selected measurements and business goals, and the misunderstanding of project level measurements in relation to program and portfolio management levels. When there is no alignment between executed measurements and provided outcomes, unnecessary effort is required from the IT project teams collecting the project data. The result is decreased motivation to continue and institutionalize benchmarking.

As shown in Figure 1, ISO/IEC 29155 series consists of multiple parts:

— Part 1 provides the overall framework model for IT project performance benchmarking. It consists of activities and components that are necessary to successfully identify, define, select, apply, and improve benchmarking;

— Part 2 prescribes the required tasks in individual benchmarking activities that are necessary to execute various activities to conduct and/or support successful benchmarking in an organization;

— Part 3 prescribes the guidance for reporting processes and contents of typical reports;

— Part 4 provides guidance for the activities to collect IT project data to be entered into and maintained in a benchmarking repository.

Further parts might follow.

This part of ISO/IEC 29155 is intended to provide guidance for reporting process and contents of typical reports in IT project performance benchmarking to produce high-quality deliverables (e.g. the benchmarking report of an instance of benchmarking, the explanatory report for issued benchmarks, and the explanatory report for released benchmarking repository) which include sufficient information to avoid misunderstanding or inappropriate usage.

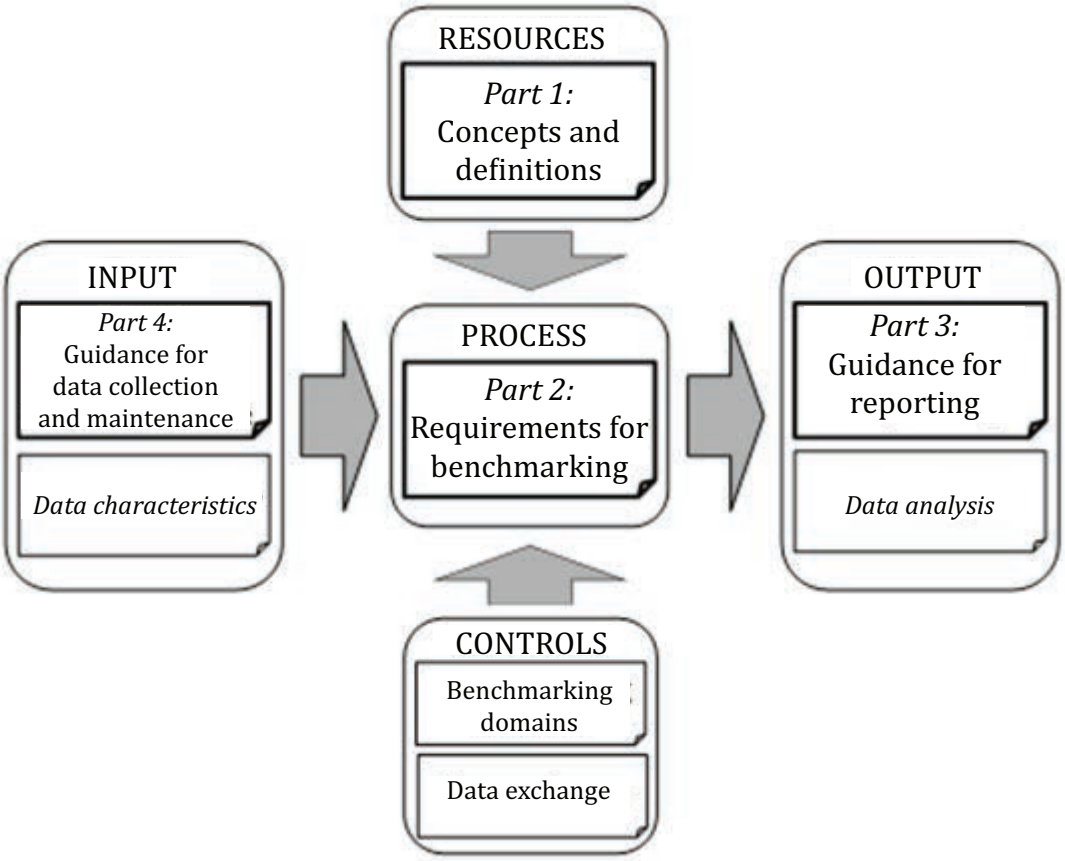

Figure 1 — IT project performance benchmarking standards overview

Systems and software engineering — Information technology project performance benchmarking framework —

Part 3: Guidance for reporting

1 Scope

This part of ISO/IEC 29155 provides general requirements and guidance for reporting processes and contents of typical reports within benchmarking activities of "the information technology (IT) project performance benchmarking framework" by prescribing:

— requirements and guidance for the reporting processes within the benchmarking framework;

— requirements and guidance for the contents of reports.

This part of ISO/IEC 29155 focuses on three major activities, i.e. "conduct benchmarking", "maintain repository", and "issue benchmarks" activities.

NOTE 1 These activities are selected, not only because the importance of the outcomes of these activities, but also the outcomes of these activities are the direct input for benchmarking users who execute "core benchmarking" activities. In addition, benchmarking users are not usually so deeply involved to these activities even though they need in-deep information to understand the benchmarking results or to select appropriate data (i.e. benchmarking repository and benchmarks).

This part of ISO/IEC 29155 also focuses on two types of reports in the benchmarking framework:

a) the benchmarking report, that describes the results of an instance of benchmarking;

b) the explanatory report, that provides complementary information about the released benchmarking repository or benchmark(s).

This part of ISO/IEC 29155 is intended for use by stakeholder(s) of IT project performance benchmarking (e.g. benchmarking user, benchmark provider, and benchmarking service provider).

NOTE 2 The following are examples of how this part of ISO/IEC 29155 can be used:

— by a systems and software acquirer (or a third-party agent), to define, order, obtain and evaluate an acceptable and creditable benchmarking report;

— by a benchmarking service provider, to produce a high-quality benchmarking report;

— by a benchmark provider, to provide complementary information about the released benchmarking repository or issued benchmarks.

It is out of the scope of this part of ISO/IEC 29115 to prescribe the particular names, formats, or explicit contents of the reports of the benchmarking activities.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 29155-1, *Systems and software engineering — Information technology project performance benchmarking framework — Part 1: Concepts and definitions*

ISO/IEC 29155-2, *Systems and software engineering — Information technology project performance benchmarking framework — Part 2: Requirements for benchmarking*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 29155-1, ISO/IEC 29155-2, and the following apply.

3.1
benchmarking analyst
person or organization that executes "conduct benchmarking" activity

3.2
benchmarking report
document of the results of an instance of benchmarking

Note 1 to entry: Document usually consists of various formats (e.g. textual descriptions, numeric values, statistical charts and tables), and is exchanged via various media (e.g. electronic documents, electronic data set, printed documents, and embedded data within specific computer software).

3.3
core report
document for providing descriptions of the process and outcomes of the benchmarking activity

Note 1 to entry: Two kinds of core reports (i.e. executive summary and detailed report) are often produced for reporting results of an instance of benchmarking activity.

3.4
explanatory report
document attached to a product for providing complementary information in order to assist understanding and to avoid inappropriate usage of the product

Note 1 to entry: Examples of an explanatory report are data element definitions, data demographics, data source information which are attached to benchmarking repositories or benchmarks.

Note 2 to entry: Examples of the product are benchmarking repository, benchmark(s), or software tools to support benchmarking activities.

4 Abbreviated terms

IT Information Technology

5 Roles of reports in the IT project performance benchmarking framework

5.1 General quality requirements for the benchmarking reports

As shown in Figure A.1, IT project performance benchmarking framework in ISO/IEC 29155 series consists of two categories of benchmarking activities:

— core benchmarking activities (i.e. "conduct benchmarking" and "utilize benchmarking results");

— supporting activities (i.e. "maintain repository", "issue benchmarks", "measure IT project", "submit data", and "provide instruments").

NOTE 1 See ISO/IEC 29155–1 and ISO/IEC 29155–2 for more information about activities, processes and tasks in the benchmarking framework.

Since individual benchmarking activities require different expertise, these activities are usually role-shared by multiple stakeholders (e.g. benchmarking user, benchmark provider, benchmarking service provider, IT project team). In addition, same activity is often assigned to multiple persons or divisions, and those are executed in parallel within and/or across organization(s).

In these circumstances, various data and documents are exchanged as the outputs and inputs of activities. Therefore, high-quality reports are pre-requisite (necessary) to ensure and facilitate effective communication between stakeholders to drive whole activities successfully.

To minimize misunderstanding, a benchmarking report should be specific and consistent with terminology and definitions.

NOTE 2 When comparing a user data element with a benchmark, misunderstanding might occur, if

— the names are similar to each other, but the definitions are significantly different (e.g. scale, measurement unit, measurement timing),

— the names and the definitions are similar to each other, but the nature of the user software is significantly different (e.g. business domain, technical complexity, degree of quality requirements),

— the names and the definitions are similar to each other, but the nature of the user project is significantly different (e.g. skills and experience of IT project teams, scale of IT projects, resource constraints of IT projects).

5.2 Identification of reports within benchmarking framework

5.2.1 Benchmarking outcomes and types of reports

The outcomes of a benchmarking activity result in a set of deliverables which usually include:

a) core reports, which provide descriptions of the process and outcomes of the benchmarking activity;

b) data products, which provide the data resulting from the benchmarking activity;

c) explanatory reports, which provide complementary information for assisting the audience to understand the outcomes of the benchmarking activity or to avoid inappropriate use of deliverables.

Core reports and explanatory reports represent the two types of benchmarking reports.

NOTE 1 Two kinds of core reports (i.e. executive summary and detailed report) are often produced for reporting results of an instance of benchmarking activity.

NOTE 2 Core reports and explanatory reports are usually presented in the form of textual descriptions together with statistics (e.g. numeric values, charts, and tables).

5.2.2 Reporting related benchmarking activities

This part of ISO/IEC 29155 focuses on three major benchmarking activities, i.e. “conduct benchmarking”, “maintain repository”, and “issue benchmarks” activities in the benchmarking framework.

These activities are selected because

— the outcomes of “conduct benchmarking” activity (i.e. benchmarking report) become the direct input for benchmarking users who execute “utilize benchmarking results” activity,

— deliverables of “maintain repository” activity (i.e. benchmarking repository) and “issue benchmarks” activity (i.e. benchmarks) are the data source for benchmarking analyst who executes “conduct benchmarking”,

— benchmarking users and benchmarking analysts are usually not involved to the execution of the activities to produce their inputs so deeply, even though they need more detailed information to

properly understand the benchmarking results or to select appropriate data (i.e. benchmarking repository and benchmark(s)).

5.3 Relationships between benchmarking activities and reports

The relationships between activities, deliverables, and reports are summarized in Table 1.

Table 1 — Relationships between activities, deliverables, and reports

Activity	"Conduct benchmarking"	"Maintain repository"	"Issue benchmarks"
Main goal of the activity	— Report the results of an instance of benchmarking	— Provide a benchmarking repository (in the form of a data set of IT projects)	— Provide benchmark(s) (in the forms of reference value(s), or reference data set(s) of IT projects)
Responsible person(s)	— Benchmarking analyst	— Repository owner	— Benchmarking analyst — Repository owner
Inputs to the activity	— Benchmarking repository — Benchmark(s)	— IT project data (output of "submit IT data")	— Benchmarking repository
Outputs from the activity	— Benchmarking report	— Benchmarking repository	— Benchmark(s)
Deliverables included in outputs from the activity	— Core reports (Mandatory) — Data products (Optional) — Explanatory report (Optional)	— Core reports (Optional) — Data products (Mandatory) — Explanatory report (Mandatory)	— Core reports (Optional) — Data products (Mandatory) — Explanatory report (Mandatory)
Typical contents of core report	— Descriptions, interpretation, and observations of the comparison results — Judgment and evaluation statements of the comparison results — Recommendations for benchmarking user — Background and context information of the instance of benchmarking — Demographics of input data (e.g. benchmarking repository, benchmarks, and IT project data) — Description of the analysis process and methods — Lessons learned — Information about the applicability of the results and limitation of their use	(Usually included in the explanatory reports)	— Descriptions, interpretation, and observations of the analysis results — Judgment and evaluation statements of the analysis results — Guide and recommendations for benchmarking analyst and user — Background and context information of the instance of issuing benchmark(s) — Demographics of input data (e.g. benchmarking repository, benchmarks) — Description of the analysis process and methods — Lessons learned — Information about the applicability of the benchmark(s) and limitation of their use

Table 1 *(continued)*

Activity	"Conduct benchmarking"	"Maintain repository"	"Issue benchmarks"
Typical content of data products	— Derived values (in the forms of numerical statistics, statistical charts, statistical tables, and so on)	— Benchmarking repository (in the form of a data set of IT project data)	— Derived values (in the forms of numerical statistics, statistical charts, statistical tables, and so on) — Derived data set (in the forms of a data set of IT project data)
Typical content of explanatory report	(Usually included in core report)	— Data element definitions — Data demographics — Data source information — Information about the applicability, limitations and remarks of benchmarking repository	— Data element definitions — Data demographics — Data source information — Information about the applicability, limitations and remarks of benchmark(s)
Subsequent activities	— "Utilize benchmarking result"	— "Conduct benchmarking" — "Issue benchmarks"	— "Conduct benchmarking"
Responsible person(s) for subsequent activities	— Benchmarking user	— Benchmarking analyst — Benchmarking user	— Benchmarking analyst — Benchmarking user

6 General requirements and guidance for reporting process

6.1 Planning phase

The expertise of the responsible person, together with the quality of the information collected during the activity, determines the quality of the report and deliverables. It is very difficult to answer the information need of users if information is only collected after the process is finished or halfway progressed.

NOTE 1 The responsible person varies depending on the activities. For example, see Table 1.

To produce useful reports, the reporting process should start from the beginning of the particular/specific benchmarking activity.

In the planning phase of a report-related benchmarking activity, stakeholders of the activity should consult or communicate with each other to build consensus on

a) major contents to be included in the reports,

b) acceptance criteria for the reports,

c) procedures to record and report necessary information to ensure traceability and reproducibility of the reports.

NOTE 2 Acceptance criteria are a set of specifications that define the judgment conditions to accept outcomes (i.e. reports and deliverables). Examples of specifications in acceptance criteria include, but are not limited to

— list of mandatory and optional deliverables

— competence of the benchmarking analyst(s)

— minimum number of data (i.e. IT projects) to be analysed to build the benchmark,

— method(s) for test and/or verify analysis result(s),

— level of significance of a test (e.g. p values for level of significance of rejection of more than 0,25),

— acceptable level of estimation errors (e.g. estimation errors fall into ranges of [+15 %, –20 %] of actual value).

6.2 Executing phase

In the execution phase of a reporting-related benchmarking activity,

a) collected information from the activity should be reviewed before taking in to the report,

b) the draft report shall be reviewed by the responsible person(s) designated in Table 1, as minimum to ensure to meet the requirements for the planned contents,

c) the draft report shall be reviewed to ensure it satisfies all the acceptance criteria.

In the case the activity is executed for specific user(s) under the agreement on acceptance criteria, the user should be given chance to review the draft report before finalizing it.

6.3 Supporting phase

6.3.1 Support for reports and deliverables

Most of the reports within benchmarking framework might be used for a long time after the first delivery. As long as the reports and deliverables will be used, the support for users of the reports and deliverables should include the following functions:

a) responding to inquiries about the reports or deliverables;

b) correcting defects in the reports or deliverables (e.g. by replacing the report or deliverables, by releasing errata or amendments);

c) receiving feedback to improve reporting processes of the activity.

6.3.2 Support for benchmarking experience base

To support the “improving” task group as outlined in ISO/IEC 29155–2, evaluation of the information products and the benchmarking activity should be stored together with the lessons learned into the benchmarking experience base.

NOTE ISO/IEC 15939:2007 defines “information product” as “one or more indicators and their associated interpretations that address an information need”. For example, information product could include templates, graphs, statistical algorithms, and interpretation guidelines.

7 Requirements and guidance for contents of reports within benchmarking framework

7.1 General requirements for reports

7.1.1 Requirements for structure and wording

As described in 5.2.1, there are two types of reports (i.e. core report and explanatory report) to report on the results of a benchmarking activity.

The output of an instance of benchmarking activity may be documented in the form of

— a single document, or

— a set of multiple documents.

In both cases, report(s) shall be

a) complete to present all the necessary information to be reported,

b) clearly structured (e.g. divide into multiple parts, chapters) from the viewpoint of the audience,

c) unambiguous to minimize misunderstanding or multiple interpretations.

Suite of reports for an instance of a benchmarking activity shall be self-contained.

References to already-published materials may be done to avoid duplications, if the referenced information is accessible for the expected audience.

NOTE The ambiguity of textual description is often caused by

— grammatical complexity (e.g. unclearness in multiple modification structure, nested listing of “and” and/or “or” conditions),

— lack of necessary alternatives (e.g. given alternatives do not cover all the possible cases),

— unnecessary use of passive-form sentences,

— excessive abstraction,

— use of unspecified terminology.

Since the audience of the report does not always have same expertise and culture, terminology in the reports should

— be based on the most commonly used terms for expected audience when synonyms exist,

— use the same selected term consistently instead of using synonyms,

— include explanatory information (e.g. glossary of terms, definition of terms).

7.1.2 Requirements for administrative information of reports

All documents (i.e. a report or part of a report) shall include:

a) document identification information to unify the document (e.g. name, codes such as ISBN, volume number, version or edition number, publisher, date of publication);

b) Author’s identification and contact information, (note that the author can be a person or organization);

c) information of related rights (e.g. patent right, copyright, trademark right, intellectual property right), responsibilities, and/or licenses, if applicable.

7.2 Activity-specific requirements and guidance for reports

7.2.1 Reports of “Conduct benchmarking” activity

The main purpose of reporting within this activity is to present results of an instance of benchmarking. The reports are produced by the benchmarking analyst, and the target audience is a benchmarking user who utilizes the result(s) of benchmarking.

The main area of interest in the report of this activity is a performance comparison between data of target IT project(s) and specified benchmark(s). These reports are usually produced in the form of a core report, and explanatory information is included in it.

A core report should include, but not to be limited to

a) descriptions, interpretation, and observations of the comparison results,

b) judgment and evaluation statements of the comparison results,

c) recommendations for benchmarking user,

d) background and context information of the instance of benchmarking,

e) demographics of input data (e.g. benchmarking repository, benchmarks, and IT project data),

f) description of the analysis process and methods,

g) lessons learned,

h) information about the applicability of the results and limitation of their use.

7.2.2 Reports of "Maintain repository" activity

The main aim of this activity is to release a benchmarking repository product. The product is usually a subset of the benchmarking repository maintained by a repository owner.

The main purpose of reporting in this activity is to explain contents and usage of the released benchmarking repository product, and reports are usually produced in the form of an explanatory report. The producer of explanatory report is the repository owner. Target audience for explanatory report includes, but is not limited to

— benchmarking analyst who uses a benchmarking repository product for executing "conduct benchmarking" and/or "issue benchmarks" activity,

— benchmarking user who uses and utilizes results of an instance of benchmarking,

— IT project team who refers the explanatory report for executing "measure IT project" activity (e.g. to define data elements).

An explanatory report should include, but is not limited to

a) data element definitions,

b) data demographics,

c) data source information,

d) information about the applicability, limitations and remarks of benchmarking repository.

7.2.3 Reports of "Issue benchmarks" activity

The main aim of this activity is to release an internal benchmark

— by an academic researcher as research result of the specific IT project dataset, or

— by a benchmarking analyst in the business field to provide business-specific benchmarks (e.g. banking, government).

Internal benchmark products are usually released as

— derived values (in the forms of numerical statistics, statistical charts, statistical tables, and so on),

— derived datasets (in the forms of a dataset of IT project data).

The main purpose of reporting in this activity is different for academic researchers and benchmarking analysts in the business field.

For academic researchers, their major interest is submitting core documents (e.g. academic articles, books) as the research results, and explanatory information is usually included into core documents.

In this case, the contents of the core report is similar to the report for “conduct benchmarking” activity, and usually should include, but is not limited to

a) descriptions, interpretation, and observations of the analysis results,

b) judgment and evaluation statements of the analysis results,

c) guide and recommendations for benchmarking users,

d) background and context information of the benchmark,

e) demographics of input data (e.g. benchmarking repository, referred benchmark(s)),

f) description of the analysis process and methods,

g) lessons learned,

h) information about the applicability of the benchmark(s) and limitation of their use.

Main purpose of reporting for benchmarking analysts in business field is to provide benchmarks. Reports are the complementary products for them, and most important is often an explanatory report. The report should include, but is not limited to

— data element definitions,

— data demographics,

— data source information,

— information about the applicability, limitations and remarks of benchmark(s).

Annex A
(informative)

Framework model of IT project performance benchmarking in ISO/IEC 29155-1

This Annex outlines the overall framework of IT project performance benchmarking (see Figure A.1).

NOTE See ISO/IEC 29155–1 for more information about the benchmarking framework and its concepts and definitions

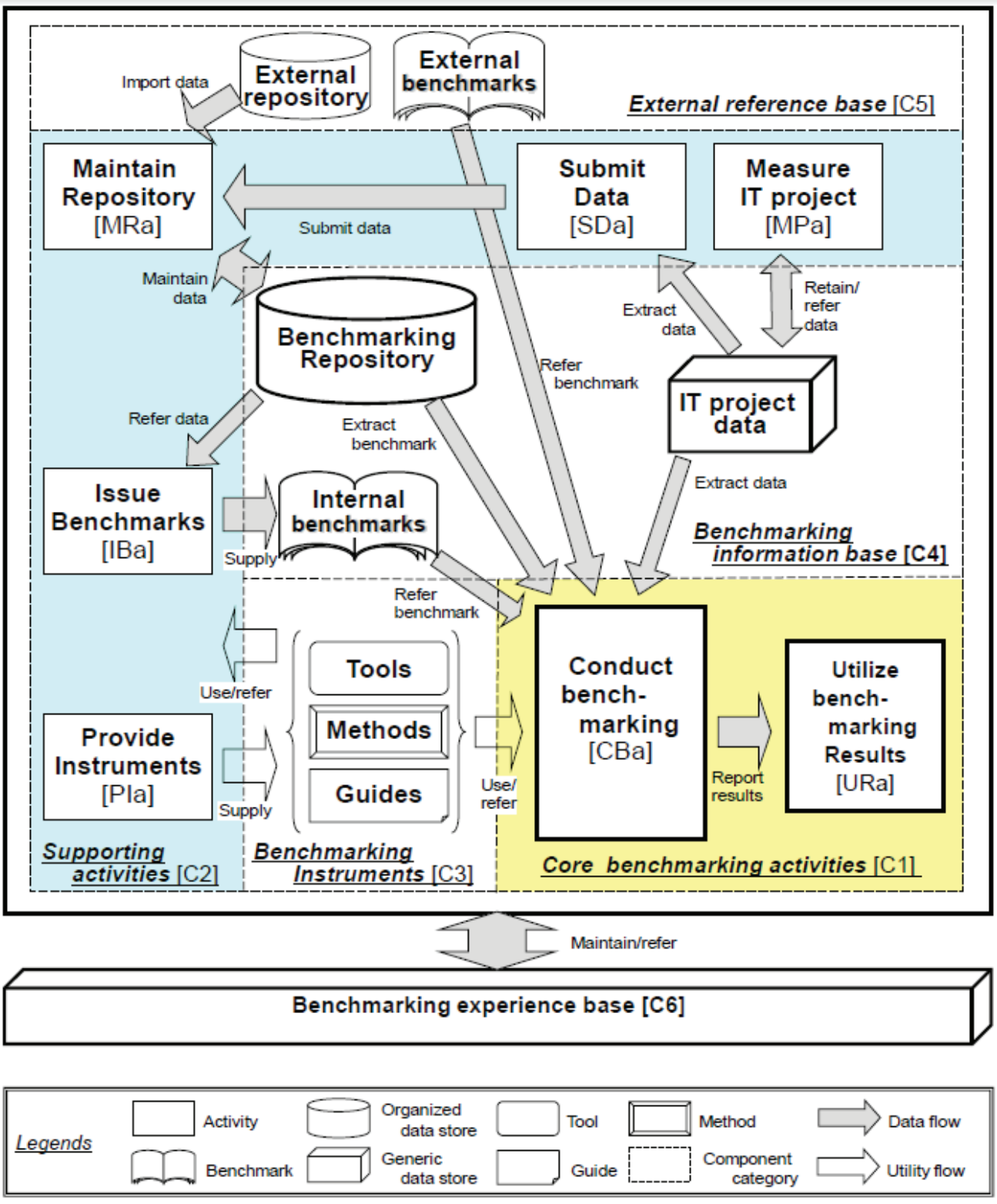

Figure A.1 — IT project performance benchmarking framework

The framework consists of the following six categories of activities or components.

— **[C1] "Core benchmarking activities"**, which collectively illustrates an instance of benchmarking.

— **[C2] "Supporting activities"**, which provides the benchmarking information base as well as instruments for use in an instance of benchmarking.

— **[C3] "Benchmarking instruments"**, used by stakeholders to conduct an instance of benchmarking.

— **[C4] "Benchmarking information base"**, which contains data for use during an instance of benchmarking.

— **[C5] "External reference base"**, which provides alternative or additional external data (i.e. repository and/or benchmarks) for an instance of benchmarking.

— **[C6] "Benchmarking experience base"**, which contains knowledge and lessons learned from present and/or past benchmarking experiences.

The first two categories (C1 and C2) introduce activities to conduct or support an instance of benchmarking. They consist of seven activities.

a) **"Conduct benchmarking"** activity, which initiates and executes an instance of benchmarking [CBa].

b) **"Utilize benchmarking results"** activity, which utilizes benchmarking results for various business purposes [URa].

c) **"Measure IT project"** activity, which measures IT project artifacts and maintains data [MPa].

d) **"Submit data"** activity, which selects and provides IT project data to be included into the benchmarking repository [SDa].

e) **"Maintain repository"** activity, which accepts, verifies, and stores IT project data into the benchmarking repository, and later manages the benchmarking repository [MRa].

f) **"Issue benchmarks"** activity, which analyses IT project data within the benchmarking repository and provides internal benchmarks [IBa].

g) **"Provide instruments"** activity, which develops and provides tools, methods, and guides to support every activity in the benchmarking framework [PIa].

For effective benchmarking, all seven of the above activities need to be properly executed.

The third category (C3) defines three types of benchmarking instruments.

— **Tools**, which provide means to support stakeholders**.**

— **Methods**, which provide procedures**.**

— **Guides**, which provide instructive information**.**

The remaining three categories (C4, C5, and C6) consist of various types of information bases.

— **Benchmarking repository**, which is a data store to maintain reliable data of IT projects used to produce a benchmark.

— **IT project data**, which is a data store to maintain data related to various IT projects.

— **Internal benchmarks,** which provide a group of commonly usable and authorized pre-determined benchmarks.

— **External repository**, which is a repository maintained by an external organization.

— **External benchmarks**, which are issued in some external organizations by analysing external repositories.

— **Benchmarking experience base** is an archive of benchmarking outcomes and lessons learned.

In the context of ISO/IEC 29155 series, the concepts of "internal" and "external" are subjective views by stakeholders, and it is dependent on the judgment of the stakeholder. For example, if Organization X decides to adopt IT project data of Organization Y, then the data of Organization Y is considered to be

a part of Organization X's internal data. Such adoption of out-of-organization data or benchmark often occurs within an enterprise group or between closely related business partners.

Bibliography

[1] ISO/IEC 15939:2007, *Systems and software engineering — Measurement process*

[2] IPA. IPA/SEC White paper 2007 on Software development projects in Japan (Fully translated English edition), IPA/SEC (Information-Technology Promotion Agency, Japan (IPA)/Software Engineering Center (SEC), May, 2010, freely available at http://www.ipa.go.jp/english/sec/

[3] ISBSG. The Benchmark 10, Project planning edition, International Software Benchmarking Standards Group (ISBSG), 2008, available at http://www.isbsg.org

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