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PEOPLE'S REPUBLIC OF CHINA**

GB/T 18491.4-2010

**Information technology -- Software measurement -- Functional
size measurement -- Part 4: Reference model**

信息技术 软件测量 功能规模测量 第4部分：基准模型

(English Translation)

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Foreword

GB/T 18491 under "Information technology - Software measurement - Functional size measurement of" total title currently consists of the following six components.

--- Part 1. definition of the concept;

--- Part 2. software size measurement methods and conformity assessment GB/T 18491.1-2001's;

--- Part 3. Verification of functional size measurement methods;

- Part 4. Reference model;
- Part 5. domain functional size measurement is determined;
- Part 6. GB/T 18491 series of standards and guidelines related to the use of standards.

This section GB/T Part of 418,491.

This section identical with the international standard ISO/IEC TR14143-4:2002 "Information technology - Software measurement - Functional size measurements -Part 4. Reference Model "(in English). Due to the international standard ISO/IEC 14143-6:2006 released late on ISO/IEC TR14143-4.

2002, therefore the original International Standard ISO/IEC TR14143-4:2002 Foreword is not involved in ISO/IEC 14143-6:2006. In the ISO/IEC TR14143-4:2002 conversion-oriented section, added preface explained in Section 6 related.

For ease of use, the ISO/IEC TR14143-4:2002, this section also made the following editorial changes.

--- Original Chapter 2 leads to ISO/IEC 9126:1991, but due to the ISO/IEC 9126:1991 has been updated to ISO/IEC 9126-1:2001, so in this section to the national standard GB/T 16260.1-2006;

--- Questions about the nature of Appendices A and B, the original Annexes A and B are normative appendix, but its content is given Foreign "assessment RUR commercial applications" and "real-time control RUR" instance. When converted to the national standards, not as Normative Appendix to use, so instead informative annex;

--- In Appendix A of example, the language code and the language instructions are given abroad when converted into national standards increased Chinese Chinese language and expression.

This part of the Annex A, Annex B and Annex C is informative appendix.

This part of the National Information Technology Standardization Technical Committee (SAC/TC28) and focal points.

This section is drafted. Shanghai computer software technology development center, China Electronics Standardization Institute.

Introduction

The user must determine FSM FSM methods applicable to the methodology used to quantify the functional size of the software. GB/T 18491.1-2001 compliance will be necessary but not sufficient. FSM to a method of evaluation process will take into account the actual implementation of FSM method evidence. Evaluation of a FSM method may require a benchmark, that is a collection of known RUR using the selected method FSM the

evaluation results with a reference result FSM benchmark method produces obtained were compared.

This section GB/T 18491 RUR standardized guidelines proposed method and the reference method of FSM. Figure 0.1 shows how to use this these benchmark results obtained. Be evaluated FSM method determines a proper function of the size of RUR pooled results. Use one or more FSM benchmark methods to measure the same RUR collection, and these benchmark results with the results obtained from test methods FSM Comparison.

Figure 0.1 RUR use and reference methods FSM

Chapter 5 of this section defines the identification, classification and selection of RUR framework. Appendix A and Appendix B provides two different fields RUR example. However, there is an exhaustive collection of RUR is idealized, the price of this collection is expensive. More RUR can RUR reference list found in Appendix C given. Basic Guide other suitable RUR RUR can be described on the basis of Chapter 5 Construct.

Chapter 6 of this section describes the general requirements for baseline FSM methods. FSM benchmark method provides a reference point, which can be controlled the FSM other methods are compared.

Information technology - Software measurement - Functional size measurement Part 4.
Reference model

1 Scope

This section GB/T 18491 specifies the reference model to verify a functional size measurement (FSM) method used (see Figure 0.1).

The reference model consists of two parts.

- a) a FSM method can be used to estimate the size of the reference user needs (RUR) classification framework. Examples of this include RUR Son, it refers more to user needs (UR) for RUR can be used.
- b) Select the FSM benchmark method instructions. According to these guidelines, the method can be compared to the FSM.

The reference model is input FSM method evaluation process. Formulas and evaluation of the implementation and interpretation of the test results are beyond the present Range section.

RUR and additional reference tables contained in this section represent only example in certain areas and circumstances of UR. Additional RUR RUR and in Appendix A, Appendix B, and the situation in the field and are not included in Appendix C of this section will be in the framework of the Association description Help next generation.

The method requires a reference to help you choose FSM reference method.

2 Normative references

The relevant provisions of the following documents by GB/T 18491 in this part of the reference in terms of this section. Where the date or edition of Reference documents, and any subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encourage the Part Parties to research points to reach an agreement to use the latest versions of these documents. Who does not note date reference documents, the latest version applies to this section.

GB/T 18491.1-2001 Information technology - Software measurement - Functional size measurement - Part 1. definition of the concept (idt ISO/IEC 14143-1:1998) GB/T 16260.1-2006 Software engineering - Product quality - Part 1. Quality model (ISO/IEC 9126-1:2001, IDT)

3 Terms and Definitions

The following terms and definitions apply to this section.

Figure 1 depicts the UR (user needs), the relationship between the composition of RUR, RUR pooled.