IEEE P1003.0 Draft 14 − November 1991

Issues Pertaining to Referencing Base Standards

Many practical writing issues pertain to referencing, for instance, parts of base standards. This includes not only referencing options, but even the concept of subsetting, or reducing the functionality of a base standard. Also an issue is how to reference multiple versions of the same standard (e.g., two different COBOL standards.)

POSIX SP Procedures and Rules

What does it mean to be a POSIX SP? Rule making for use of the word 'POSIX'' must address criteria for such use. Also, many issues remain to be resolved in the area of ballot procedures. Should IEEE delegate to others the ability to develop POSIX SPs? If so, should IEEE maintain a registry of such efforts?

A.6 Conformance to a POSIX SP

A POSIX SP must address test methods for itself. In the simplest case, testing the base standards referenced is sufficient. In more complex cases, additional test methods will be necessary. In the worst case (if a base standard is subsetted, for example), the test methods for the base standards may have to be rewritten or expanded within the POSIX SP.

At the same time, P1003.3 will have to consider revisions to the *Test Methods for Measuring Conformance to POSIX* to address test methods for POSIX SPs (e.g., additional assertion types, minimum requirements for testing POSIX SPs, . . .)

A.7 Structure of Documentation for POSIX SPs

This clause gives specific format and content requirements to profile writers who are developing POSIX SPs.

A.7.1 Principles

The requirements for content and format of POSIX SPs are based on the following principles:

(1) Profiles shall be directly related to base standards and conformance to profiles shall imply conformance to base standards.

(2) POSIX SPs shall follow the rules for drafting and presentation of POSIX SPs detailed here.

(3) POSIX SPs are intended to be concise documents that do not repeat the text of the base standards.

(4) Profiles making identical use of particular base documents shall be consistent, down to the level of identical wording in the POSIX SPs for identical requirements.

A.7.2 Multipart POSIX SPs

Many profiles will be documented and published as individual POSIX SPs. However, where close relationships exist between two or more profiles, a more appropriate technique can be used.

Common text between related profiles is essential to ensure consistency, portability, and interworking, to avoid unnecessary duplication of text, and to aid writers and reviewers of POSIX SPs.

A *single-part POSIX SP* shall not contain the definition of more than one profile.

The following rules apply to *multipart POSIX SPs*:

(1) A multipart POSIX SP shall contain the definition of a complete profile or of a related set of profiles.

(2) A part of a multipart POSIX SP may contain a section of the definition of one or more profiles.

(3) Where a multipart POSIX SP includes more than one profile, the part structure shall permit each profile to be the subject of a separate ballot; i.e., its constituent profiles shall be clearly identifiable, and the multipart structure shall ensure that this can be accomplished.

(4) Wherever possible, the references made from one part to another should be to complete parts. However, controlled use of one-way references to sections of other parts is permitted in order to obtain a reasonable multipart structure.

Because there may also be potential disadvantages from overuse of the multipart POSIX SP capability, such as difficulties in gaining approval for a complex linked set of parts, or reduction of the content of a part to a small amount of text, considerable care should be taken with its use.

NOTES:

(1) When a section of text appears in several profiles, possibilities exist for sharing the corresponding code (etc.) for the implementation of several profiles, and the tests applicable to the use of the referenced base standards will be applicable to the testing of several profiles.

(2) It follows that it is in the interest of the implementors to promote the identification of common sections of text as parts of POSIX SPs, but even more to promote, in future standardization and profile work, the use of already defined parts of POSIX SPs, so that profiles fall into a few ‘‘common molds.’’ In particular, this allows implementation of a part of a POSIX SP with confidence that it may be used in the implementation of profiles as yet undefined, so that products are open to future development.

(3) Possibilities exist for a complete profile to be referenced from within the definition of another profile.

A.8 Rules for Drafting and Presentation of POSIX SPs

Throughout this Annex, which is concerned with documentation content and layout, reference is made to POSIX SPs. A POSIX SP, or part thereof, may contain a whole profile definition or part of one or more profile definitions. The wording of the Annex assumes that it is describing an undivided POSIX SP that defines one profile in its entirety. Its application to the other cases is easily deduced. Note, however, that each part of a Multipart POSIX SP shall use the same format as far as appropriate.

A.8.1 General Arrangement

The elements that together form a POSIX SP are classified into three groups:

(1) Preliminary elements are those elements that identify the POSIX SP, introduce its content, and explain its background, its development, and its relationship with other standards and POSIX SPs.

(2) Normative elements are those elements setting out the provisions with which it is necessary to comply in order to be able to claim conformity with the POSIX SP.

(3) Supplementary elements are those elements that provide additional information intended to assist the understanding or use of the POSIX SP.

These groups of elements are described in the following clauses.

A.8.2 Preliminary Elements

A.8.2.1 Foreword

The foreword shall appear in every POSIX SP. It consists of a general part giving information relating to the organization responsible and a specific part giving as many of the following as are appropriate:

— An identification of the organization or committee that prepared the POSIX SP; information regarding the approval of the POSIX SP

— A statement that the POSIX SP cancels or replaces other documents in whole or in part

— A statement of significant technical changes from the previous edition

— A statement of which annexes are normative and which are informative

A.8.2.2 Introduction

The introduction shall appear in every POSIX SP. It gives specific information about the process used to draft the POSIX SP and about the degree of international harmonization that it has received.