**SPARC International Compliance and Compatibility Committee**

**SCD Testing, Compliance and Waivers Process**

**Issue 0.6**

**Date: December 10, 1992**

## 1. Overview

SPARC International chartered the Compliance and Compatibility Committee ( C&C Committee) to identify, and develop consensus on, a robust set of interface specifications for use on all SPARC-based platforms. The committee fulfills this charter by creating periodic editions of the SPARC Compliance Definition (SCD) which defines the basis for SPARC product interoperability at the binary (run-time) level.

This document describes the rules and processes the C&C Committee follows to reach agreement on and issue SCD specifications.

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## 1.1 Terminology

Organizational terms relevant to the C&C committee process are defined for reference here.

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|---|---|
| ABI | Application Binary Interface. a binary interface definition used for application interchange. When used as an unqualified proper name, it refers to the SPARC UNIX |

Working in conjunction with the SCT is the *SPARC Application Compliance Toolkit*. *SACT* is used to validate that software applications adhere to the SCD. It is in two parts:

- AFV (Application File Verifier) which checks the content and format of

the application binary, and

- ABV (Application Binary Verifier) which instruments the application at run time and confirms that all library calls are within the constraints imposed by the SCD.

The mail alias sact-review@sparc.com is available for those interested in reviewing the SACT activities. The purpose of this alias is to expose the SACT design and code to improve the overall quality of the suite.

## 2. Waivers

The need for waivers arises due to errors or ambiguities in:

- the SPARC Compliance Definition published by SPARC International,
- the SPARC Compliance Test Suite distributed by SPARC International,
- the implementation of the product being tested.

*Waivers Due to SCD Ambiguities/Errors:*

There will be occasions, due to errors in the SPARC Compliance Definitions, where the branding process may incorrectly report an error. SI, at its sole discretion and upon request from the licensee, may decide that such errors are permissible and grant a waiver.

Waivers in this category will be added to a compendium of interpretations of the SCD and SI will periodically publish this list, which may be referenced in a subsequent waiver request against the same version of SCD. Such waivers remain in force until the SCD is updated, which means that they are permanent against a particular issue of the SCD (e.g., SCD 2.0).

Conflict with another edition of the SCD does not form sufficient grounds for granting waivers.

*Waivers Due to SCT Errors:*

There will be occasions, due to SCT implementation errors, where the branding suite may incorrectly report an error. SPARC International, at its sole discretion and upon request from the licensee, may issue a waiver due to deficiencies in the SCT suite, provided that the evidence supporting the waiver request both substantiates the claim of deficiency in the test system, and demonstrates that the implementation correctly conforms to the version of the SCD under test.

These waivers give rise to SCT bug reports, which should be fixed within the normal SCT maintenance cycle. The waivers will be added to a compendium of in-

terpretations of the SCT. SI will periodically publish this list, which may be referenced in a subsequent waiver request against the same version of SCT.

*Waivers Due to Implementation Errors:*

A no-waiver policy on implementation errors is ideal but not realistic. Accordingly, where there are a limited number of implementation errors and these are demonstrated to be minor in nature (i.e., they have little impact on application interoperability), SI, at its sole discretion and upon request from the licensee, may issue a temporary waiver permitting the SPARC trademark to be applied to the system for a period of 12 months, after which the errors must be eliminated.

Vendors of compliant systems must make temporary waivers available to their prospective customers, on request, in a standard form. SI will likewise copy temporary waivers applicable to any specified system to anyone on request.

The SI branding certificate will identify whether or not there are any temporary waivers against the product. The logo will not reveal the existence of temporary waivers.

The intention is that a licensee will correct errors and make a maintenance release incorporating the necessary corrections within the 12-month period, as well as ensuring that all subsequent shipments of the product incorporate the corrections. The brand therefore applies to a product version and its maintenance releases. No maximum number of waivers in this category is defined, although a policy of reasonableness will be followed.

Waivers will be granted automatically if they reference a waiver granted for the same reason, provided that the referenced waiver is still valid. Such waivers will be valid for 12 months.

## 2.1 Interpretations Working Group

In maintain a consistency in the acceptance and rejection criteria, SI will allow for peer group review of waiver requests.

SPARC International will create an Interpretations Work Group under the auspices of the Compatibility and Compliance committee. The Work Group currently consists of all members of the Compatibility and Compliance committee, thus allowing every SI member company to have a representative on the Work Group. The role of the Interpretations Work Group is to review all the requests for waivers where the response is not obvious and make recommendations to SI on their resolution.

AI SI to decide whether the Interpretations group should be a smaller subset.

Straightforward waiver requests are processed by SI without review by the Work Group. Waiver applicants may ask that a specific request be forwarded to the Work Group for review and recommendation. Applicants should note that exercising this alternative *may* extend the response time to the request.

## 2.2 Waiver Process

Applicants requiring waivers should follow the following steps. Once all information requested by SI is received, it is expected that the waiver decision cycle would be completed in less than five weeks.

The waiver assessment process is as follows:

a.)The originator fills in details of the waiver request using the template provided with the compliance suite. This is sent to SPARC International via email (scd-waivers@sparc.com). Waiver requests delivered in other forms may be ignored.

AI The waiver request template should be provided with the binary SCT tests.

AI SI needs to setup a new email alias.

b.)The originator is required to enter details in sections A and B of the document. Since Section B of the document may be forwarded to the Interpretations Work Group it *should not* contain information that allows the originator to be identified. It is the responsibility of the originator to ensure that this is the case. SPARC International acknowledges receipt of the waiver request and assigns it a unique number.

AI SI needs to setup a uniquely-numbered auto-acknowledgement.

c.)If SI considers more information is required, the document will be returned to the originator requesting such information. Once SI feels sufficient information is received, the request analysis process will begin.

d.)If the waiver request references a waiver that has already been granted, SI will verify that the test results supplied with this waiver agree with those noted on the referenced waiver. If this is the case, a waiver will be granted under the referenced waiver number and SI informs the originator of this.

e.)If SI feels the request requires a more in-depth analysis, it will be forwarded to the Interpretations Work Group. SI will prepare a copy of Sections B

and C for distribution to the Interpretations Work Group with the possible addition of initial SI review comments. Note that information regarding the originator of the request is *not* provided to the Interpretations Work Group.

f.) Members of the Interpretations Work Group may, individually or collectively, add comments to the document and must email these comments to the SI contact within a limited time period.

AI Need to clarify how this exchange will be accomplished

g.) SI will analyze the comments from the Interpretations Work Group and provide a consolidated comment. This would normally take the form of voting statistics with comments from objectors to the majority vote being specified. The identity of the voters would not be given.

h.) SI returns the complete document to the Interpretations group for final waiver resolution. SI completes Section D and returns the document to the originator.

### 8.1 Appeal

If an applicant wishes to dispute the refusal by SI to grant a waiver, they may ask for a second review by the Interpretations Working Group. The applicant can add additional information and comments to the waiver request to further explain or refute the reasons given in the initial refusal. The recommendation resulting from this second review will be final.

### 8.2 Current Waivers

Periodically, a list of current waivers will be generated as a document register for public availability. This document register will neither contain details of the originator of waiver request nor of the comments made by various parties during the decision cycle.

## 9. References


- SPARC International Compliance and Compatibility Committee - Rules, Process and Procedures, December 1992.
- SPARC International Compliance and Compatibility Committee - Interface Nomination and Approval Procedures, December 1992.
- Technology License and Trademark Agreement, dated June 12, 1990.

- AT&T, System V Application Binary Interface, 1990, Prentice Hall, ISBN 0-13-877598-2.
- AT&T, System V Application Binary Interface: SPARC Processor Supplement, 1990, Prentice Hall, ISBN 0-13-877630-X.