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15 September 2006

Lowell G Johnson
8124 Virginia Ely Road
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lgjohnson@rangenet.com

Re: P1003.1 - Information Technology - Portable Operating System Interface (POSIX®)

Dear Lowell:

I am pleased to inform you that on 15 September 2006 the IEEE-SA Standards Board approved the above referenced project until 31 December 2010. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/1003-1.pdf>.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at <http://standards.ieee.org/guides/par/roster.xls>. Please forward this list to me via e-mail at s.hampton@ieee.org no later than 14 December 2006.

Please visit our website, IEEE Standards Development Online (<http://standards.ieee.org/resources/development/index.html>), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at +1 732 562 6003 or by email at s.hampton@ieee.org.

Sincerely,

Sherry Hampton
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Standards Activities
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CC: ajosey@opengroup.org

PAR Request Date: 01 July 2006**PAR Approval Date:** 15 September 2006**PAR Signature Page on File:** Yes**Type of PAR:** Revision to IEEE Standard**Status:** Revision to an Existing IEEE Std 1003.1-2001**Root Project:****1.1 Project No.:** **P1003.1****1.2 Type of Document:** Standard**1.3 Life Cycle:** Full-Use**1.4 Is this document in ballot now?** No**2.1 Title**

Information Technology - Portable Operating System Interface (POSIX®)

Old Title

IEEE Information Technology - Portable Operating System Interface (POSIX®)

2.1 Amendment/Corrigenda Title**3.1 Working Group Name**[Austin Joint Working Group](#)**Working Group Chair**[Josey, Andrew](#)

Phone: 44 118 9508311 x2250

Email: ajosey@opengroup.org

Working Group Vice Chair**3.2 Sponsor**[IEEE Computer Society Portable Applications \(C/PA\)](#)**Sponsor Chair**[Johnson, Lowell G](#)

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Name of Standards Liaison Representative (if applicable)**3.3 Joint Sponsor****4.1 Type of Ballot:** Individual**4.2 Expected Date of Submission for Initial Sponsor Ballot:** October 2006**4.3 Projected Completion Date for Submittal to RevCom:** April 2008**5.1 Approximate number of people expected to work on this project:** 100

5.2 Scope: IEEE Std 1003.1-200x defines a standard operating system interface and environment, including a command interpreter (or "shell"), and common utility programs to support applications portability at the source code level. It is intended to be used by both applications developers and system implementors. IEEE Std 1003.1-200x comprises four major components (each in an associated volume): 1. General terms, concepts, and interfaces common to all volumes of IEEE Std 1003.1-200x, including utility conventions and C-language header definitions, are included in the Base Definitions volume of IEEE Std 1003.1-200x. 2. Definitions for system service functions and subroutines, language-specific system services for the C programming language, function issues, including portability, error handling, and error recovery, are included in the System Interfaces volume of IEEE Std 1003.1-200x. 3. Definitions for a standard source code-level interface to command interpretation services (a "shell") and common utility programs for application programs are included in the Shell and Utilities volume of IEEE Std 1003.1-200x. 4. Extended rationale that did not fit well into the rest of the document structure, containing historical information concerning the contents of IEEE Std 1003.1-200x and why features were included or discarded by the standard developers, is included in the Rationale (Informative) volume of IEEE Std 1003.1-200x. The following areas are outside of the scope of IEEE Std 1003.1-200x: * Graphics interfaces * Database management system interfaces * Record I/O considerations * Object or binary code portability * System configuration and resource availability IEEE Std 1003.1-200x describes the external characteristics and facilities that are of importance to applications developers, rather than the internal construction techniques employed to achieve these capabilities. Special emphasis is placed on those functions and facilities that are needed in a wide variety of commercial applications. The facilities provided in IEEE Std 1003.1-200x are drawn from the following base documents: * IEEE Std 1003.1™, 2004 Edition (POSIX-1) (incorporating IEEE Stds 1003.1™-2001, 1003.1™-2001/Cor 1-2002 and 1003.1™-2001/Cor 2-2004) * Open Group Technical Standard, 2006, Extended API Set Part 1 * Open Group Technical Standard, 2006, Extended API Set Part 2 * Open Group Technical Standard, 2006, Extended API Set Part 3 * Open Group Technical Standard, 2006, Extended API Set Part 4 * ISO/IEC 9899:1999, Programming Languages - C.

Old Scope: 1003.1-1990 and its supplements + 1003.2-1992 plus its supplements + SUSv2 XSH5 + XCU5 + XBD5 + Portability Considerations from 1003.1/1003.2 plus additional rationale and notes from 1003.1 and 1003.2 + amendments to 1003.1/.2 - legacy features - obsolescent features + XNS5.2 & resolutions passed by OGTGnet concerning the included sections of XNS + issues raised by IEEE/ISO Interps against .1/.2 and resolutions passed by OGTGbase concerning the included sections of SUSv2 + harmonization of options vs. feature groups + resolution of XCU text marked OF,OP,PI and UN (on a case by case basis). See the long scope for further detailed information.

5.3 Is the completion of this document contingent upon the completion of another document? No

5.4 Purpose: The purpose of this standard is to provide applications developers and system implementors a standard operating system interface and environment, including a command interpreter (or "shell"), and common utility programs to support applications portability at the source code level.

Old Purpose: Provide a single standard addressing the needs of users of all the documents being revised and supported by as much of the overall industry as possible. Address problems discovered during the lifetimes of the current documents. The current standards are approaching ten years or more in age; and this is the promised revision, whose scope is being expanded by including accepted practice based on the contents of the Single UNIX Specification.

5.5 Need for the Project: This document is supported widely in the industry and these changes will address problems identified during the lifetime of the current document and benefit the users of IEEE Std 1003.1. New features to be introduced will also reflect latest practice in the industry.

5.6 Stakeholders for the Standard: The stakeholders are the IT industry at large, as these are foundation standards for many operating systems.

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes **Presented Date:** 2006-06-01

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? ? Yes

Technical Committee Name and Number: ISO/IEC JTC1 TC1 SC22

Contact person:

Contact person Phone Number:

Contact person Email Address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

7.4 Additional Explanatory Notes:

The purpose of the proposed standard is to revise 1003.1-2001 to include additional interfaces that have become widely adopted and to address known issues with the existing standard. As per IEEE Std 1003.1, this work is being undertaken by the Austin Group, a joint working group of IEEE, ISO/IEC SC22 JTC1 and The Open Group. The resulting work will be adopted as an IEEE standard, an ISO/IEC standard and an Open Group standard. Details of the proposed changes in this revision follow: The revision will add new functionality from The Open Group Extended API Sets Parts 1 through 4 The revision will address issues arising from ISO TR 24715:200x, "Conflicts between POSIX and the LSB". The revision will include new work items for additions to the specification, to reflect current practice and knowledge, as proposed by the IEEE, The Open Group or ISO SC22 by July 31st 2006 The revision will review the use of fixed path filenames within the standard, for example the at, batch and crontab utilities that presently have a requirement for use of the directory /usr/lib/cron The following features, marked Legacy or obsolescent in the Base documents, will be considered for withdrawal in the revision. >From the System Interfaces Volume this means that selected Legacy Interfaces, Headers and External Variables will be considered for withdrawal: Selected interfaces from the XSI Legacy option group bcmp bcopy bzero ecvt, fcvt, gcvt fcvt ftime gcvt getwd index mktemp rindex wcsvcs Selected Obsolescent features from the following list will be considered for withdrawal: functions: bsd_signal() getcontext(), gethostbyaddr() gethostbyname() makecontext(), pthread_attr_getstackaddr() pthread_attr_setstackaddr() scalb() setcontext(), swapcontext() ualarm() usleep() vfork() headers: fnmatch.h FNM_NOSYS glob.h GLOB_NOSYS netdb.h h_errno regex.h REG_ENOSYS wordexp.h WRDE_NOSYS utilities: cp -r option * Changes to existing options and functionality The following features will be considered for marking as Legacy or obsolescent in the Base documents, to denote a status of future withdrawal: >From the Shell and Utilities volume: The Batch Environment Services and Utilities option. Specifically XCU Chapter 3 and the following utilities from XCU chapter 4: qalter qdel qhold qmove qmsg qrerun qrls qselect qsig qstat >From the System Interfaces volume: The POSIX tracing option, specifically functionality denoted by the options: _POSIX_TRACE _POSIX_TRACE_EVENT_FILTER _POSIX_TRACE_INHERIT _POSIX_TRACE_LOG Functionality denoted by the Process Sporadic Scheduler and Thread Sporadic Scheduler options. Interpretations and Defect Reports Issues raised by Austin Group Interpretations against IEEE Std 1003.1 will be addressed in the revision. Issues raised by Defect Reports as recorded in the Aardvark reports and SD/5 by will be addressed in the revision Consistency Changes to the standard will be made to make it self-consistent with the material merged. Options. The revision will consider the options within the standard, and whether its possible to reduce the number of them. A move of functionality from an option into the Base would include an an update to the subprofiling considerations appendix to record the grouping by name and the list of associated functions. Functional extensions from new documents over the Base document may be added, possibly as one or more options.

8.1 Sponsor Information:

Is the Scope of this project within the approved scope/definition of the Sponsor's Charter? Yes

If no, please explain: