

Subject: Annual report from J1

The J1 annual report is attached. There are no outstanding projects, missed deadlines, etc. The report is, indeed, substantially identical to those of the last several years with the exception of section 3g, below.

Sincerely,

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**INCITS Technical Committee
Annual Report for TC J1
Covering the period 2001.04.01 to 2002.04.01
Subgroup: Technical Committee J1, PL/I**

1. Executive Summary

J1 has development and maintenance responsibility for standards and technical reports related to the PL/I Programming Language. Since the relevant documents have been published, and all of the committee's projects are in maintenance status, J1 went into maintenance/correspondence status several years ago, and has remained in that status. There has been no significant activity or events in the last several years.

J1 is expected to shift its projects and documents into "stabilized" status during this year's reporting period.

2. Technical Projects (updated 2002.04.18).

This section is identical to the Secretariat's list (and, except for format, to last year's report), except that this Chair has no recollection, or copy, of the information bulletin on X3.53 which is cited below for the first time.

a. Project 212M: Maintenance and revision of X3.53-1976.

Programming Language PL/I

Includes X3.53:1976/TIB-1:1983

Title: PL/I Information Bulletin #1 (Applies to X3.53.1976)

Corresponding international project and document:

ISO/IEC Doc.: IS 6160:1979

JTC 1 Project: 22.05

- b. Initial public review (milestone 4) date.
Standard reaffirmed in 1993 and 1998. No further action contemplated until the next five-year review cycle, at which time, a "reaffirm" recommendation is expected.
 - c. Project Description.
This project addresses revision, reaffirmation, or withdrawal of X3.53-1976 (R1993, R1998), American National Standard Programming Language PL/I, as required by ANSI rules.
 - d. Publications during past year
None
 - e. Statement of progress and current status.
No significant activity. No maintenance requests. This project is complete and on schedule. This project has no outstanding work items.
 - f. Future Plans
This project is in maintenance status. The TC anticipates no further changes to this standard.
- a. Project 296M: A general-purpose subset of PL/I.**
Corresponding international project and document:
ISO/IEC Doc.: IS 6522:1992 ("General Purpose PL/I")
JTC 1 Project: 22.06
- b. Initial public review (milestone 4) date.
Standard approved late 1987, reaffirmed 1993 and 1998. No work pending.
 - c. Project description.
This project addresses maintenance and revision of X3.74-1987 (R1993, R1998), which is intended to represent a subset of the PL/I language small enough for small computers but still suitable for scientific, commercial, and systems programming.
 - d. Publications during the past year
None.
 - e. Statement of progress and status.
No activity this year. No maintenance requests. Standard approved in late 1987 and reaffirmed in 1993. Project is in maintenance status. No maintenance or clarification requests received during the reporting year. Corresponding ISO standard completed and approved. ISO standard is up for review this year; SC22 has recommended reaffirmation and J1 will presumably follow suit. There are no outstanding work items on this task at present.

a. Project 297M, Development of real-time extensions to PL/I.

Standard Designation: X3/TR-8:1988

Title: A Working Definition of the Proposed Extensions for PL/I Real-Time Applications

Corresponding international project and document: none

b. Target dates

Technical report published and available through Global Engineering Documents. No outstanding tasks.

c. Project description

This project addresses addition of language features to PL/I to make it suitable for real-time programming or programming involving multiple asynchronous tasks and events. Its output was a technical report, which was submitted to X3 for approval and publication in January 1985 and published in 1989.

d. Publications during past year

None.

e. Progress and Status

No activity on project 297 this year, none anticipated in the near future. No further work on project 297 is anticipated at this time.

f. Future trends and plans

It is not clear that there is a sufficient requirement, or sufficient resources, to justify the development of an independent PL/I real-time extensions Standard. J1 would recommend that the real-time area would be an appropriate one for a functional Standard with language bindings, rather than a language-specific activity. If such a functional standard is started, J1 recommends its technical report as part of the US input to that effort, since the issues addressed are not limited to PL/I and its dialects.

Summary of Present Status

The TC is in maintenance status, with no outstanding tasks. There has been no significant activity in the last two years.

3. Committee Activities

a. Previous Year's Meetings

The committee has not met face to face in the last several years and no meetings are scheduled. Members remain in paper and electronic mail communications when needed.

b. Planned meetings

No meetings are scheduled for the coming year.

c. Officers (*carried forward*)

Chairman, John C. Klensin

Vice-chairman, Charles Nylander

International representative: vacant, Chair substituting under maintenance TC rules.

Vocabulary representative: Arthur Coston

The committee has adopted several informal strategies for spreading the work of its officers, and its general administrative burdens, over a wider portion of its membership.

d. Membership

The following is a complete list of Principal and Alternate members of J1 according to the records held by the Chair. It is unchanged in the last several years and, with the exception of the Chair's "day job" affiliation, consistent with Secretariat records (updated version attached).

Mr. Arthur W. Coston	Applied Information Systems (P)
Dr. John C. Klensin	Individual expert (P)
Mr. David Morey	Individual expert (P)
Mr. Charles Nylander	Mathsoft (P)
Mr. George H. Royer	Individual expert (P)
Mr. Bruce C. Wright	SoftWright Systems (P)

e. Liaison activities

Due to the committee's lack of an active program, liaisons to J1, other than to CT22 and INCITS itself are inactive and will be reactivated only if needed. The J1 Chair also acts as SC22 Project Editor for PL/I and provides liaison in that capacity.

f. Administrative matters of note

The name of the programming language addressed by this technical committee is "PL/I", i.e., upper-case "P", upper-case "L", slash, upper-case roman numeral "I". The spelling "PL/1" does not refer to any known standard or language.

The gradual attrition of membership and interest in the correspondence committee may, in the near future, make it difficult to continue to respond to inquiries about reaffirmations or to take other actions. There is a Netnews group devoted to PL/I which has a reasonable number of participants and occasionally lively discussions and a freeware implementation of the General Purpose Subset language is apparently underway.

We expect to recommend that the efforts of this committee be put into "stabilized" status within the coming year.

g. Procedural matters of note

See "recommendations", below.

h. Recommendations

The perceived value of any voluntary standards process, and the willingness of vendors and users to support it, is ultimately dependent on the perceived quality of the technical work and the consensus built around it.

Short-cut and fast track processes are highly desirable - both to get work out quickly and to reduce costs of meaningless activities - when there is clear evidence of high technical quality and good consensus. But they also pose a risk. Unless carefully applied and with adequate review, procedures that allow for haste can be used to slip efforts through the system that do not have an appropriate level of quality and consensus. Depending on their source, these efforts may even represent the marketing efforts of a small cluster of interests. If the quality is high, and industry consensus exists around them, that is not a problem. But, if it is not, and they are approved as National or International Standards, the reputation of the entire system is put at risk.

Programming language standards have long been understood to be more complex, and often more sensitive in terms of the impact on other work, than is typical for INCTIS or JTC1 documents. These documents also often require a high degree of specialization and time to review properly. The experience of the last few years strongly suggests that existing procedures and review time allowed for "fast track" documents virtually guarantees that proper review by appropriate communities will not occur: there isn't enough time, the CT22 process and timing do not allow for exposure of documents to *public* review and hence by people who might be materially affected by the particular documents under consideration, and there is no practical mechanism for concluding, after preliminary review, that it is inappropriate to fast-track a particular document.

I strongly recommend that the JTC1 Fast Track procedures, and probably the corresponding PAS ones, be reviewed with an eye toward providing more careful, competent, and, when appropriate, public, review of complex and/or critical documents. In particular, it should be possible for a TAG to conclude, after examination of a particular draft standard, that it is inappropriate for accelerated processing due to the need for more serious and public review, rather than merely submitting technical criticisms on details of the document.

4. Anticipated Projects

None at present. *However*, if there were significant interest and adequate resources, it would soon be an appropriate time to propose extensions to PL/I to explicitly accommodate multi-octet character sets and language bindings to them for, e.g., the various graphics and database standards that require such character sets. As pointed out in letters to SC22, this capability is latent, although not completely explicit, in X3.74-1987. No evidence has yet appeared of such interest or resources, but new development efforts might motivate it.

In any event, the present membership of the TC would favor extension work only in terms of add-on modules, rather than alterations to the base standard(s), as discussed below.

J1 does not collect or disburse funds of any type. All expenses in the last several years (primarily email and maintenance of online mailing lists) have been covered by the Chair out from other resources.

5. Future Trends in this Technical Area

J1 has suggested in other contexts that programming language standards should be issued, revised once, and thereafter either reaffirmed or withdrawn with a revision only if it is needed to clarify significant issues and then limited to those clarifications. This suggestion is based on the conviction that further development within the context of the existing and established language is rarely either economically justified or a service to the user community of that language. J1 has concluded from this that developments in programming language standards beyond a single revision should either be handled as strict extension standards (including language bindings to a functional standard) or considered as new language standard proposals. The latter might be initiated as "closely related to" or "deriving from" an existing earlier language standard, but obligated to justify themselves independently on the basis of economics, resources, and demand. We note with interest that this approach seems to be consistent with new "business model justification" trends in NCTIS and JTC1.

The TC continues to follow its own advice in this area, and no new PL/I-derived languages are anticipated.

Attachment 1. Internal Procedures

J1 is operating according to the maintenance committee procedures of the X3 SD-2 and has established no additional internal procedures.

Attachment 2. Financial Statement

J1 does not collect or disburse funds. See section 4.

Attachment 3. Membership

Updated copy of Secretariat-supplied listing attached (see 3.d above)