

EDINBURGH REGIONAL COMPUTING CENTRE

Minutes of meeting of the Program Library
Sub-committee held on Monday, 2nd December
1968 at 3.30 p.m. in the William Robertson
Building.

PRESENT

Prof. D.J. Finney (in the chair)
Prof. P. Vandome
Mr. D.N. Allum
Mr. R.E. Day
Mr. D. Kershaw
Mr. D.T. Muxworthy

1. APOLOGIES

Apologies for absence were received from Dr. Fulton.

2. MINUTES OF PREVIOUS MEETING

There were no comments on the minutes of the previous meeting, hold on the 1st October, 1968.

3. REPORT ON PROGRESS

It was reported that 100 sets of ERCC documentation had been made up and that a set would automatically be sent to departments with 4 or more computer users (i.e. 39 departments). It was recommended that directors of research council units be asked to nominate official contacts for ERCC within each unit. Members of this committee should hold abstracts and user specifications, but not necessarily the other documents.

It was recommended that ERCC should draft standards for reporting testing in the validation of programs.

A report on demand for library programs should be available for the next meeting of this committee.

A program to sort and print the ERCC program catalogue is now available.

4. I.C.I. PROCEDURE LIBRARY

Mr. Kershaw commented on the numerical analysis routines in the ICI procedure library. (There are 37 such routines, together with 9 statistical, 7 miscellaneous and 5 output routines). A summary of his comments are shown in the appendix to these minutes. The committee could not see anything of outstanding interest amongst the other routines.

It was decided to ask the Computer Board whether ICI were prepared to sell the routines singly. If it were L matter of all or nothing, then this committee could see no strong case for purchase.

ERCC should compare the ICI library with the Fortran subroutines already available and report to the next meeting.

5. REPORT ON NCC LIBRARY

ERCC feels that it is the NCC's responsibility to set up a National Program Library and to define documentation standards. This is within NCC's terms of reference but outwith their present resources. Mr. Day reported that a meeting of 15-20 representatives was hold in October to discuss feasibility of applications libraries. It had been suggested that various centres around the country should maintain specialist libraries. The meeting thought that NCC should take the greater part of the administration.

It emerged that Belfast University had been collecting physics programs and that Chelsea C.A.T. had collected a large number of numerical analysis programs in Algol.

6. LIBRARY RESPONSIBILITY

In reply to a question it was stated that ERCC would accept responsibility for library packages which they made available but could not accept any responsibility for deficiencies in manufacturer-supplied programs.

7. DEPARTMENTAL LIBRARIES

It was suggested that ERCC should inform departmental libraries of the computer manuals and books they should acquire (and how to acquire them). An abridged accessions list could appear in the Newsletter.

8. DATE OF NEXT MEETING

It was agreed to hold the next meeting on Monday, 10th February 1969 at 3.30p.m.

(signed D.J. Finney 10 February 1969)

APPENDIX

I. C. I. Procedure No.	Subject	Remarks (refer to ERCC AA routines only)
1 to 7	Interpolation	This is the principal area which is covered by ICI and not very well by ERCC. But the usefulness of those routines is queried.
50 to 54	Quadrature	The ICI routines do not compare favourably with ERCC's.
100 to 104	Matrices	ICI routines are paralleled by ERCC's except possibly 'Matrix Eigensolution', which originated from N.P.L.
150,151	Polynomial Solution	ICI routines are similar to ERCC's, which are unsatisfactory; a new routine is being written in Computer Science Dept.
152,153	Solution of sets of equations	No parallel at ERCC.
155	Solution of non-linear one variable equations.	An unnecessary program.
300 to 307	Optimization	ERCC have four of these methods (303-6); the remainder, particularly no. 307 (Davidon, constrained) are desirable and an offer to buy these might be considered.
350 to 354	Differential equations	Of these 5, 3 methods are poor and another is already available. Work in this area is in progress in Computer Science. (comment from Dr. G. Cooper).
450,451	Curve-fitting	One of these is available at ERCC. The other is of doubtful value.