Communications
Canada

UNIVERSITY RESEARCH
CONTRACT PROGRAM

A STUDY OF ADMINISTRATIVE PROCESSING AND OVERHEAD COSTS

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UNIVERSITY RESEARCH CONTRACT PROGRAM

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A STUDY OF ADMINISTRATIVE PROCESSING AND OVERHEAD COSTS

Project Number 7526

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Management and Computer Services

May 1975

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PROJECT ASSIGNMENT

Project Title:	A STUDY OF ADMINISTRATIVE PROCESSING AND OVERHEAD COSTS
Requestor:	J. Halina Director General Research Policy and Planning Department of Communications
Terms of Reference:	Outline the current administrative procedures required in the processing of University proposals and contracts. Estimate the costs of processing University proposals and contracts.
Survey Area:	Headquarters
Sources of Information:	Previous DMC Studies Director University Programs Project Officers DFI DAS DSS (Science Procurement Branch)

SUMMARY

The basic steps necessary in administering proposals and contracts have been described at Appendix A.

A recently revised flow chart at Appendix B is a guide and condensation of the administrative steps required in the processing of proposals and resulting contracts.

An estimate of administrative costs was developed from a survey as described in Appendix C.

The survey data indicates that an average cost estimate in the order of $5,000. for both the proposal and contract activities could serve as guide in cost benefit considerations.

Further, as an additional guide an administrative cost factor in the order of 1/3 be added to the total contract budget to estimate the overall costs to the public of the University Research Program.

OBSERVATIONS

1. Based on the data provided, a computer regression analysis revealed that the total administrative cost are slightly higher than one third of the contract value (0.36 - 0.35). Allowing for estimate errors of plus or minus 10% this factor would range from (0.39 to 0.32).

2. As could be expected, generally the administrative costs increase proportionately with contract value.

3. Based on the limited survey estimates for one year only, the information is insufficient to suggest an economic contract value within the limits of the available data. Since the data indicates, however, that there is an average administrative charge of $5,000. associated with each contract, it would seem that no contracts should be considered for less than that value.

ADMINISTRATIVE STEPS-UNIVERSITY RESEARCH PROPOSALS AND CONTRACTS

1. DOC Research Project Officers assist in the development and preparation of proposals for contract research in their particular areas of expertise based on known or forecast research requirements.

2. The Universities prepare proposals and preliminary costing estimates based on previous contract experience or the requirements outlined in DOC University Guide. It has been estimated that 30-50% of the proposals submitted by the universities have had some preliminary input by DOC Officers in research areas of mutual interest.

3. The proposals are received by the Director of University Programs. Each proposal is identified by number,title and description. The proposals together with a summary are submitted for consideration to each of the four Research Advisory Committees.

4. The first screening of the proposals by the Committees results in the assignment of a selection category as determined by the criteria established by the Advisory Committees as follows:

   A. Acceptable

   B. May be acceptable but requires more detail or additional evaluation

   C. Unacceptable.

5. Project Officers are assigned to A and B projects. In the case of B projects additional review and further reporting to the Committee is necessary.

6. A second screening and review by the Advisory Committee is held to further evaluate the B category proposals based on any additional data or comments provided by the Project Officers.

7. The Advisory Committees submit their recommendations through DUP to the Executive of the Research Committee (DM, ADM's and DGRPP).

8. The Executive Committee review the proposal/project and proposed funding allocations and submit contract recommendations for approval by the Minister.

9. Following approval by the Minister, the Project Officer assigned arranges proposal and contract processing through DUP for contract negotiation through DAS, DSS and the University concerned.

10. DUP extracts from the proposal and the request for contract submission project control details for inclusion in a project control schedule for follow-up reporting requirements and periodic reviews by the Committees.

11. DAS prepares a requisition on DSS for a Scientific Contract ensuring that financial coding details are correct and contract amounts are within DFI budget allocations, in addition, the contract project officer is identified, contract period and reporting dates are shown. Two copies of the proposal together with the contract requisition are forwarded to DSS for processing.

12. DSS prepares the final contract ensuring all legal and contractual obligations are included in the contract. DSS arranges signing of the contract with the University. During this phase of the process, the Project Officer, the DSS Contracts Officer and the Researcher may be involved in further discussions concerning contract details.

13. The University Researcher during the research phase submits progress reports as milestones or specific reporting dates in the project are reached as detailed in the contract. If the progress reports have not been submitted or are late, the Researcher is advised by a letter from DUP. Since the periodic release of funds is primarily based on a progress payment system, the University usually submits billing statements with each progress report.

14. The project Officer evaluates the progress reports and if satisfied with the results, certifies that a portion of the research services have been completed and requests a release of funds from DFI. DFI in turn forward a request to DSS to issue a progress payment cheque to the University.

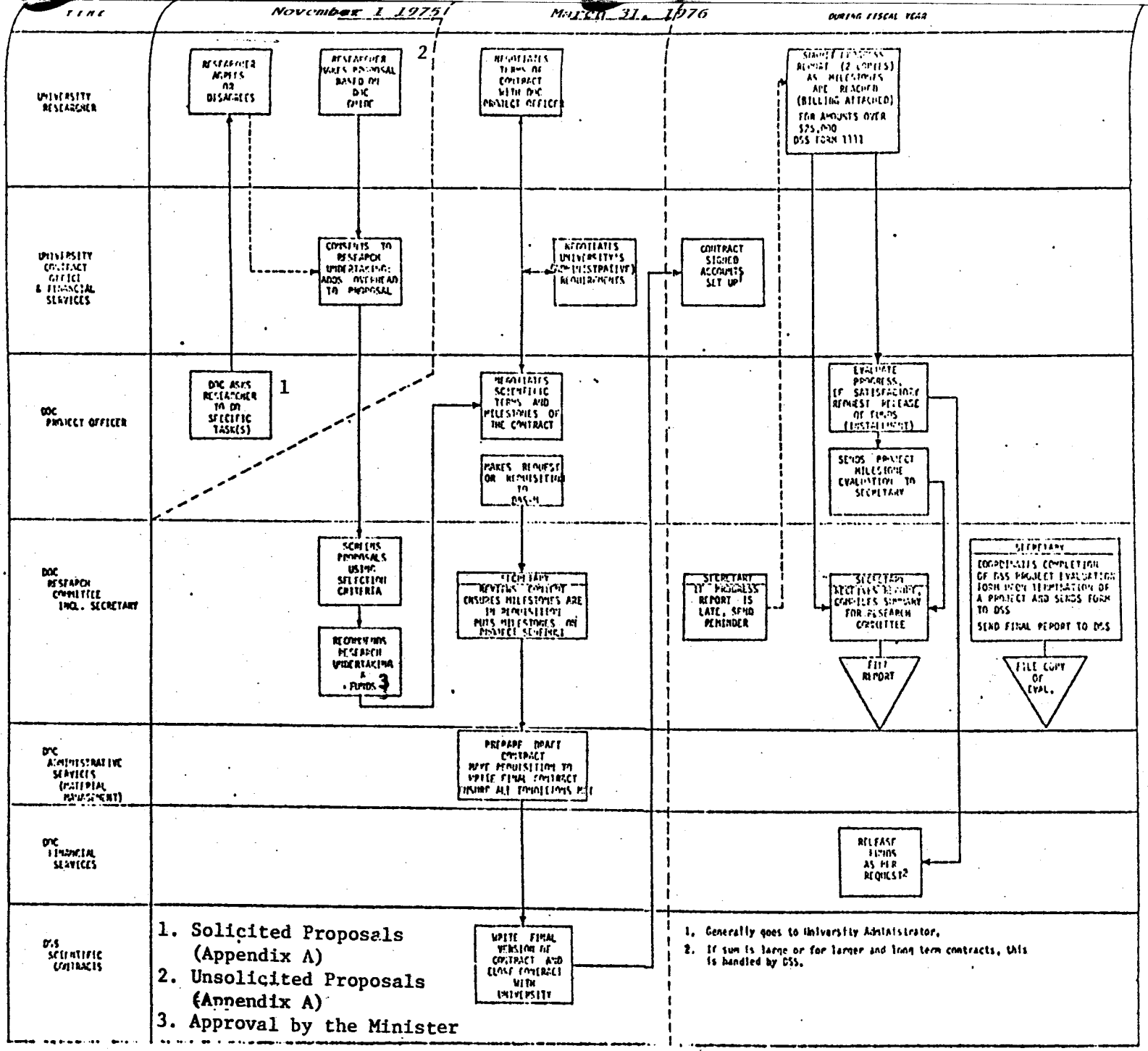
15. A copy of the progress report is fowarded to DUP for inclusion in a report summary for circulation to the appropriate Research Advisory Committee.

16. On submission of the final report by the University, DUP co-ordinates and completes, in concert with the Project Officer, an evaluation form and forwards to DSS together with a copy of the report.

17. The final report is analysed by the appropriate Research Advisory Committee to determine potential departmental benefits or the identification of subject matter that may require new or further research.

18. The total proposal-contract cycle is approximately 20 months. The steps as outlined do not reflect a considerable amount of interaction between all the participants involved in the process.

19. A flow chart of these administrative steps is shown at Appendix B.


TIME
November 1 1975
March 31, 1976
DURING FISCAL YEAR
UNIVERSITY RESEARCHER
UNIVERSITY CONTRACT OFFICE & FINANCIAL SERVICES
DOC PROJECT OFFICER
DOC RESEARCH COMMITTEE INCL. SECRETARY
DOC ADMINISTRATIVE SERVICES (MATERIAL MANAGEMENT)
DOC FINANCIAL SERVICES
DSS SCIENTIFIC CONTRACTS
RESEARCHER AGREES OR DISAGREES
RESEARCHER MAKES PROPOSAL BASED ON DOC GUIDE
2
NEGOTIATES TERMS OF CONTRACT WITH DOC PROJECT OFFICER
SUBMIT PROGRESS REPORT (2 COPIES) AS MILESTONES ARE REACHED (BILLING ATTACHED) FOR AMOUNTS OVER $25,000 DSS FORM 1111
CONSENTS TO RESEARCH UNDERTAKING: ADDS OVERHEAD TO PROPOSAL
NEGOTIATES UNIVERSITY'S (ADMINISTRATIVE) REQUIREMENTS
CONTRACT SIGNED ACCOUNTS SET UP
DOC ASKS RESEARCHER TO DO SPECIFIC TASK(S)
1
NEGOTIATES SCIENTIFIC TERMS AND MILESTONES OF THE CONTRACT
MAKES REQUEST OR REQUISITION TO DSS-H
EVALUATE PROGRESS, IF SATISFACTORY REQUEST RELEASE OF FUNDS (INSTALLMENT)
SENDS PROJECT MILESTONE EVALUATION TO SECRETARY
SCREENS PROPOSALS USING SELECTION CRITERIA
RECOMMENDS RESEARCH UNDERTAKING & FUNDS
3
SECRETARY REVIEWS CONTENT ENSURES MILESTONES ARE IN REQUISITION PUTS MILESTONES ON PROJECT SENFINCI
SECRETARY IF PROGRESS REPORT IS LATE, SEND REMINDER
SECRETARY RECEIVES REPORT, COMPILES SUMMARY FOR RESEARCH COMMITTEE
FILE REPORT
SECRETARY
COORDINATES COMPLETION OF DSS PROJECT EVALUATION FORM UPON TERMINATION OF A PROJECT AND SENDS FORM TO DSS
SEND FINAL REPORT TO DSS
FILE COPY OF EVAL.
PREPARE DRAFT CONTRACT MAKE REQUISITION TO WRITE FINAL CONTRACT ENSURE ALL CONDITIONS MET
RELEASE FUNDS AS PER REQUEST2
WRITE FINAL VERSION OF CONTRACT AND CLOSE CONTRACT WITH UNIVERSITY
1. Solicited Proposals (Appendix A)
2. Unsolicited Proposals (Appendix A)
3. Approval by the Minister
1. Generally goes to University Administrator.
2. If sum is large or for larger and long term contracts, this is handled by DSS.

COSTING ESTIMATE SURVEY

A random sampling approach utilizing project officer estimates from each of the four research areas as one method of obtaining a reasonably representative sample of annual personnel costs was abandoned for the several reasons:

a) personnel selected have left the department or were unavailable for comment

b) departmental transfers of personnel initially tasked with the original proposal and related contract processing

c) a number of contracts were renewals and did not involve initial proposal processing during the period under review

d) the responses precluded their selection in a representative sample.

In lieu of the above approach a summary was prepared from estimates obtained from a telephone survey, from the project officers available for comments concerning the 52 contracts and 122 proposals likely to be considered by them during the period under review. Costing estimates obtained from their responses other proposal and contract summaries are included in this Appendix.

The respondents to the telephone interview survey gave a wide range of answers to the two questions asked,

a) approximately how many man-days per year do you estimate were expended in evaluating proposals forwarded for your review or, proposals initiated by you for contract considerations?

b) approximately how many man-days per year do you expend in administrative activity associated with each contract?

In those cases where the project officer was involved in more than one contract, only one of the contracts was selected for inclusion in the survey as a representative estimate.

In all cases the respondents had difficulty in isolating their man-day activity estimates that could be directly related to specific proposals or the resulting contracts. Several respondents advised that travel and on-site discussions were involved in some of the contracts, or proposal and contract subject matters were discussed at seminars, etc., as part a mutual sharing of research information in specialized areas of common interest. In one case (deleted from the survey) the project officer worked daily with the contract researchers on-site at CRC.

Since none of the project officers maintained records of the extent of their man-day involvement in proposal/contract processing it was stressed that their responses were strictly estimates.

1974/75 URCP CONTRACT SUMMARY

CONTRACT AMOUNTS ($)	NUMBER OF CONTRACTS	PERCENTAGE
5,000. - 7,499.	7	13.4
7,000. - 9,999.	15	28.8
10,000. - 12,499.	12	23.0
12,500. - 14,999.	7	13.4
15,000. - 17,499.	4	8.7
17,500. - 19,999.	2	3.8
20,000. - 24,999.	-	
25,000. - 27,499.	3	5.7
41,300.	1	1.9
48,722.	1	1.9

Space Program

- 6 Contracts $54,603
- Range ($6,533. - $15,000.)
- Average $9,100.

Communication Systems

- 18 Contracts $284,000.
- Range ($7,447. - $41,300.)
- Average $15,778.

Radio and Radar

- 6 Contracts $63,878.
- Range ($6,000. - $13,300.)
- Average $10,631.

Socio-Economic and Regulatory

- 22 Contracts $269,968.
- Range ($5,000. - $48,722.)
- Average $12,721.

Total Program - 52 Contracts $672,358.

SUMMARY TABLE ADMINISTRATIVE COST - CONTRACT VALUE

CONTRACT	ADMINISTRATIVE COST ($)	CONTRACT VALUE ($)
1	6315	15000
2	3821	9200
3	9615	26000
4	6315	15000
5	2353	7477
6	7715	12500
7	2325	6000
8	4400	13300
9	3745	9997
10	2005	6500
11	5315	15000
12	3030	8350
13	5305	8000
14	4519	13742
15	4175	11500
16	4059	6868
17	2317	8502
18	3635	8000
19	5720	11000
20	3855	12000
TOTAL	$90539	$223936
AVERAGE	$4527	$11197

1974/75
UNIVERSITY RESEARCH PROPOSALS/ CONTRACTS
SAMPLING SURVEY - COSTING ESTIMATES

Space Program - 6 Contracts

Sample	Project No. 74-	Project Officer	Proposals Man-days ( ) Cost $	Contracts Man-days ( ) Cost $	Contract Amount $	DSS Costs $	Overhead Costs $	Total DOC Costs $ (Admin Costs)
1.	-701	Dr. N. Nuspl	(2) 400	(18) 3600	15,000	1,200	1,115	21,315 (6,315)
2.	-702	Dr. R. Mamen	(2) 400	(10) 2000	9,200	736	685	13,021 (3,821)

Communications Sytems - 18 Contracts

3.	-605	Mr. L. Durr *	(10) 2,000	(18) 3,600	26,000	2,080	1,935	35,615 (9,615)
4.	-417	Dr. C. Sheppard *	(5) 1,000	(15) 3,000	15,000	1,200	1,115	21,315 (6,315)
5.	-526	Dr. E. Feldstead	(2) 400	(4) 800	7, 477	598	555	9,830 (2,353)

6.	-530	Mr. F. Smith	(6)	(21)				
			1,200	4,200	12,500	1,200	1,115	20,215
								(7,715)
7.	-516(C)	Mr. D. Ross	(2)	(5)				
			400	1,000	6,000	480	445	8,325
								(2,325)
8.	-509	Mr. C. Collins	(3)	(9)				
			600	1,800	13,300	1,064	990	17,754
								(4,400)
9.	-523	Dr. T. Hartz	(2)	(9)				
			400	1,800	9,997	800	745	13,742
								(3,745)

Socio-Economic and Regulatory - 22 Contracts

10.	-206	Mr. A. Bluteau	(1)	(4)				
			200	800	6,500	520	485	8,505
								(2,005)

11.	-302	Mr. P. Lavoie	(3)	(12)				
			600	2,400	15,000	1,200	1,115	20,315
								(5,315)
12.	-306	Mr. L. Green	(2)	(5)				
			400	1,000	8,350	668	620	11,380
								(3,030)
13.	-707	Mrs. A. Casey Stahmer	(4)	(15)				
			800	3,000	8,000	640	595	13,305
								(5,305)
14.	-207	Mr. B. Sommers	(2)	(10)				
			400	2,000	13,742	1,099	1,020	18,261
								(4,519)
15.	-703	Dr. A. Elliot	(2)	(10)				
			400	2,000	11,500	920	855	15,675
								(4,175)

Additional Data:

16.	-535 (Space)	Dr. Mc Math	(5) 1,000	(10) 2,000	6868	549	510	10,927 (4,059)
17.	-534 (Space)	Mr. A. Reynaud	(2) 400	(3) 600	8502	682	635	10,819 (2,317)
18.	-412 (Comms)	Mr. P.E. Allard[3]	(5) 1,000	(7) 1,400	8,000	640	595	11,635 (3,635)
19.	-508 (Comms)	Mr. E. Lambert	(10) 2,000	(10) 2,000	11,000	880	820	16,720 (5,720)
20.	-521 (Radio-Radar)	Barrington	(4) 800	(8) 1,600	12,000	960	895	15,855 (3,855)
TOTAL			(74)	(203)	$223,936	$18,116	$16,845	$314,529
AVERAGE			(3)	(10)	$11,197	$905	$842	$15,726
TOTAL			$14,800	$40,600				($90,539)
AVERAGE			$740	$2030				($4,526)

URCP ADMINISTRATIVE COST ESTIMATES

Processing of 122 proposals that result in 52 contracts.

1. Cost Estimates Method[1];		
a. 122 proposals, 3 man-days at $200	$73,200	
b. 52 contracts, 10 man-days at $200	$104,000	
c. Travel- $200 per contract	$10,400	
d. DUP Salaries [2]	$30,000	
e. DAS/DFI - $50 per contract	$ 2,600	
f. DSS Charges 6.5% of $672,000	$43,700	$263,900
2. Total Cost Factor[3]		
1/3 of total contract values ($672,000)		$224,000
3. Average Cost Guide[3]		
$4,500 per contract		$234,000

Notes:

1. In the proposal-contract cycle, both proposal and contract costs are incurred in each fiscal year. Project officer costs were based on their annual man-day estimates for each activity.

2. Possible revisions to University Guide, related publication expenses and Research Advisory Committee costs not included.

3. The DSS charge of 8% for F Y 75/76 included in this data.

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DATE DE RETOUR

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8 JAN 1986			
10 FEB FEV 1986			

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