

**FUTURE OF THE DEBT MANAGEMENT PROGRAM
PROSPECTS AND OPTIONS**

**Prepared for the International Development Research Centre
by
Nihal Kappagoda
Consultant**

February 1996

ARC 814
001-1-1-1-2
43

TABLE OF CONTENTS

| | |
|---|----|
| INTRODUCTION | 1 |
| THE NEED FOR TA IN DEBT MANAGEMENT | 2 |
| Scope of Debt Management Projects | 3 |
| Changing Needs in the 1990s | 4 |
| HISTORY OF IDRC INVOLVEMENT | 5 |
| Collaboration in the 1980s | 5 |
| Launching of the IDRC Program | 6 |
| Pricing and Program Difficulties | 7 |
| IDRC at Cross Roads | 9 |
| OPTIONS | 10 |
| Closure of the Program | 10 |
| Active Marketing of CS-DRMS | 12 |
| Product and Services | 13 |
| Delivery Mechanism | 13 |
| Composition of the DRMS Group | 14 |
| Pricing | 15 |
| Prospective Markets | 16 |
| Is There a Market Among Non-Traditional Clients? | 20 |
| TYPICAL PROJECT CYCLE | 21 |
| STAFF REQUIREMENTS | 24 |
| BUDGET ESTIMATES | 25 |
| FUTURE DEBT MANAGEMENT REQUIREMENTS | 28 |
| SUMMARY OF RECOMMENDATIONS | 29 |
| Annex 1: Summary of Discussions with Agencies Consulted | 32 |
| Annex 2: Persons Consulted | 37 |
| Annex 3: Terms of Reference | 39 |
| Annex 4: Alternative Project Cycle and Budget Estimates | 41 |
| Annex 5: CS-DRMS and DMFAS Projects | 42 |

Abbreviations

| | |
|----------|---|
| AfDB | -African Development Bank |
| AsDB | -Asian Development Bank |
| BCEAO | -Banque Centrale des Etats Edel' Afrique de l'Ouest |
| BEAC | -Banque des Etats de l'Afrique Centrale |
| CIDA | -Canadian International Development Agency |
| COMSEC | -Commonwealth Secretariat |
| CS-DRMS | -Commonwealth Secretariat Debt Recording and Management System |
| DMFAS | -Debt Management and Financial Analysis System |
| DMO | -Debt Management Office |
| DRMS | -Debt Recording and Management System |
| DRS | -Debtor Reporting System |
| EBRD | -European Bank for Reconstruction and Development |
| EDC | -Export Development Corporation |
| ELAS | -Economic and Legal Advisory Services |
| ESAIDARM | -Eastern and Southern Africa Initiative on Debt and Reserves Management |
| FSU | -Former Soviet Union |
| IDRC | -International Development Research Centre |
| IMF | -International Monetary Fund |
| SAC | -Structural Adjustment Credit |
| Sida | -Swedish International Development Agency |
| TA | -Technical Assistance |
| TAG | -Technical Assistance Group |
| TOR | -Terms of Reference |
| UNCTAD | -United Nations Conference on Trade and Development |
| UNDP | -United Nations Development Programme |
| UNITAR | -United Nations Institute for Training and Research |
| USAID | -United States Agency for International Development |

INTRODUCTION

1. This consultancy was commissioned by the International Development Research Centre (IDRC) to provide guidance on the future of the debt management program. It became necessary following the decision by the Canadian International Development Agency (CIDA) to discontinue support of the program in Francophone countries of West Africa and the requirement laid down by IDRC that the program becomes revenue generating. This made it necessary to examine whether a commercial environment can be created in a field that has been dominated mainly by technical assistance (TA) agencies since the Mexico debt crisis of August 1982. It would involve a return to the environment that prevailed prior to this date when the market for advisory services in debt management, including the computerization of debt data based on main frame computers, was dominated by merchant or investment banks. None of the TA projects implemented to date has attempted full cost recovery or generated revenue for the implementing institution.

2. The terms of reference (TOR) provided to the consultant was wide ranging. He had many discussions with agencies and persons involved in providing TA for debt management. This provided an opportunity to obtain an overview of TA activities in the field and place IDRC's efforts in a broader context. In the early days of the program of the Commonwealth Secretariat (COMSEC) in the 1980s, its intellectual input and financial support made a major contribution to the software development. Thereafter, it financed some Commonwealth debt management TA projects. In the 1990s, IDRC began a debt management program of its own which focussed principally on Francophone Africa after support was obtained from CIDA.

3. There are two basic options open to IDRC. The first is to close down the program at the end of 1996. This will be analyzed for its implications on client governments, IDRC and the French language version which was developed for the program in Francophone Africa, the COMSEC which owns the Commonwealth Secretariat Debt Recording and Management System (CS-DRMS) software and the Crown Agents in London, the other distributor of the software. The second option is for IDRC to market it to client governments actively, by itself as at present, within a modified corporate structure for the program, jointly with other agencies in the public or private sectors or through a new agency independent of IDRC. It will involve decisions on the product being marketed, the institutional mechanism for program delivery, project pricing to enable revenue to be generated and its implications for the COMSEC and Crown Agents. The prospects for marketing the product to agencies outside of government will also be investigated. The third option of continuing the program as IDRC has in the 1990s is not explored. It would lead to the inevitable decision in favour of closure as the response of the institution to requests received in the past was not adequate or aggressive enough for the demands placed on the program. This was partly due to the limitations placed by CIDA's funding and geographical area of interest.

4. Staff of CIDA, the Export Development Corporation (EDC), IDRC and North-South Institute, World Bank, United Nations Development Programme (UNDP), United Nations Institute for Training and Research (UNITAR), United Nations Conference on Trade and Development (UNCTAD), Swedish International Development Cooperation Agency (Sida), COMSEC, Crown Agents, European Bank for Reconstruction and Development (EBRD) and Asian Development Bank (AsDB) and some

others who are or were involved in debt management projects in the past were consulted during November and December 1995. The consultant wishes to express his appreciation to all of them for the time spent in discussing the issues. Without exception, they all expressed the hope that IDRC will not close its program. There is strong interest among those interviewed in the program area and considerable goodwill towards IDRC. A summary of the discussions with various agencies is provided at Annex 1 as it may be useful for follow-up action. The list of persons consulted is at Annex 2 and the TOR for the consultancy at Annex 3.

THE NEED FOR TA IN DEBT MANAGEMENT

5. The debt crisis emerged as a major factor affecting the international payments system in August 1982 when Mexico, the largest debtor in the Third World at the time, defaulted on its debt service payments. It brought forth collaborative efforts between the governments of western industrialized nations, international financial institutions and multinational commercial banks on a scale that was not considered possible earlier. This collaboration, which was aimed at preserving the international monetary system, had a measure of self interest and consequently, fell short of the needs of severely indebted developing countries. Initially, action was taken on rescheduling arrears and payments falling due during consolidation periods and providing new money to meet the financing needs of these countries. International action was taken in a piecemeal manner until the second half of the 1980s. The launching of the Baker Plan and Brady Initiative led to the evolution of a debt strategy through concerted international action, albeit slowly, for tackling the debt problems of severely indebted countries. By the early 1990s it was recognized that these countries could not afford to carry their large overhang of debt. As a consequence, debt restructuring programs were formulated involving a combination of debt forgiveness, reduction and rescheduling with varying degrees of concessionality, and the mobilization of resources from bilateral and multilateral agencies in support of structural adjustment and stabilization programs negotiated with the World Bank and International Monetary Fund (IMF) respectively.

6. The adjustment programs that were formulated for implementation by developing countries inevitably included improvements in the economic management capability of central agencies of government, ie. the Ministries of Finance and Planning and Central Banks. These programs also included measures to improve the debt management capability in the country. In some instances, these were included as conditionalities in the adjustment programs requiring governments to establish Debt Management Offices (DMOs). This provided opportunities for TA agencies to launch initiatives to assist developing country governments to meet their debt management requirements.

Scope of Debt Management Projects

7. The main objectives of the TA programs were to record and manage external debt more effectively. These were met by the COMSEC and UNCTAD¹, the main providers of TA in this field, by the design of projects covering the following:

- the definition of a TOR and establishment and staffing a DMO with full-time and consultancy staff;
- the formulation of a well-defined legal, institutional and administrative framework to monitor the contracting of loans, their utilization and repayment and the issue of government guarantees;
- the establishment of administrative arrangements for the collection of debt data required for its monitoring and management at a central location;
- provision of facilities for the storage, retrieval and analysis of debt data by the establishment of a manual system initially, leading to computerization. This involves the supply of a debt management software and the purchase of appropriate hardware and proprietary software and support through a 'hot line' service for the debt management software; and
- the provision of training in aspects of debt management that are relevant to the needs of the borrowing country. These could include training in the installation and use of debt management software; familiarizing staff with the nature of capital markets and the requirements for accessing them; debt restructuring covering rescheduling, reduction and forgiveness, and refinancing; and loan portfolio analysis with a view to improving the country's debt profile.

8. The projects implemented by the TA agencies attempted to cover these elements to the extent possible. Their success depended on the priority assigned to debt management by the country, the dedication of staff in the DMO to the project, the size and complexity of the loan portfolio, and the commitment of the TA agency. These projects, although involving computerizing loan data as an element, were very labour intensive due to the diffused responsibility for external borrowings among several government agencies and their unwillingness to work together in building up a database at a single location. In many countries, debt management projects were implemented at a time when computerization within governments was at an early stage.

9. Half way through the current decade, reports by the COMSEC and UNCTAD indicate that 86 countries are currently or will shortly be using the CS-DRMS or DMFAS software. The COMSEC has 48 installations with 2 pipeline projects, mostly in Commonwealth developing countries, while UNCTAD has 27 installations with 9 pipeline projects world wide. At present 137 countries report to the World Bank's Debtor Reporting System (DRS). This is necessary to meet a statutory requirement for all borrowers from the World Bank unless its staff makes a case to the Board for a waiver which is generally granted in cases where steps are being taken to improve reporting. Some of this reporting is done manually. Others produce the required reports in hard copy from computerized databases while in a few cases the reporting is done electronically where the software

¹ COMSEC uses the CS-DRMS software while UNCTAD uses the Debt Management and Financial Analysis System (DMFAS) software in their projects.

has an interface with the World Bank's DRS. There is a need for TA in debt management in countries that have not computerized their debt data which are potential markets for Debt Recording and Management System (DRMS) projects. There may be a market even where the data has been computerized but the software does not meet the country's needs fully. In other cases, countries with computerized databases may need advisory services in areas such as debt restructuring and the institutional and legislative framework for borrowing and the issue of guarantees. In addition, there are 17 potential borrowers who do not report to the DRS.

10. When TA programs in debt management were formulated in the first half of the 1980s, the computer environment was more backward. Organizing and collecting debt data and, where possible, computerizing the data were priorities for most countries. This was critical in countries that had defaulted on debt service payments and were attempting to renegotiate the payments falling due. The widespread use of personal computers was just beginning when debt management software was introduced to Ministries of Finance and Central Banks. The demands for interaction with larger systems that were in the planning stages at that time in areas such as cash management in the Treasury and foreign exchange management in the Central Bank could be ignored and the debt management software was marketed as a stand alone system. The needs and the computer environment had changed by the second half of the 1990s.

Changing Needs in the 1990s

11. Many developing countries are moving towards reaching full convertibility of their domestic currency for current account transactions and thereby achieving Article VIII status with the IMF. As a consequence, countries are tending to monitor total public debt instead of external public debt only. Debt management software needs to reflect this. Although external and domestic debt may be handled in different modules, they need to be amalgamated in reports on total public debt. On-lending by government is important in many countries requiring a separate module to monitor and manage these loans. This is more important than external debt itself in some countries of the Former Soviet Union (FSU) and Eastern Europe. It will no longer be adequate to state that on-lending could be handled in a separate database. The software should provide for this explicitly. Debt restructuring is important for many countries and the debt restructuring modules in the software need to be user friendly and able to cope with the situations that will be encountered by the countries. An electronic interface with the DRS is a requirement for each borrower from the World Bank as this is the most expeditious way of reporting debt.

12. Unlike in the past, an interface with other software being used in government agencies is a requirement. The main systems that need these interfaces are budget, cash management and loan accounts in Ministries of Finance and Treasuries and foreign exchange and reserves management in Central Banks. Since many of these systems are specific to each country, interfaces that should be developed for data transfer between debt management software and these systems have also to be country specific. Further, debt management software will have to operate in networks that are now common in workplaces. This should be balanced with the need for confidentiality of debt data in the country.

13. There are greater concerns than in the past about the legislation and regulations for borrowings and the issue of guarantees by the government. Advisory work on debt management should provide for active support in this area instead of the mere commentary on these issues that was done at the time of the initial assessments. The relaxation of foreign exchange controls by many developing countries has led to the Exchange Control Departments in Central Banks ceasing to be sources of information for private non-guaranteed debt. As a consequence, if countries wish to monitor this debt increasing reliance has to be placed on the daily reporting of foreign exchange receipts and payments by commercial banks to the Central Bank. The forms on which this information is reported have to be structured in a manner that will enable the required data to be obtained and compliance by the banks monitored closely. This is not easy to achieve but provides the only method by which the data can be captured.

HISTORY OF IDRC INVOLVEMENT

Collaboration in the 1980s

14. It will be useful to recount IDRC's involvement in the Commonwealth debt management program briefly, in particular the development and use of the CS-DRMS software. The program had its origins in the fall of 1982 when, following consultations with Commonwealth Finance Ministers in the aftermath of the Mexico debt crisis, the Secretary-General of the Commonwealth gave a mandate to the Technical Assistance Group (TAG) (now called the Economic and Legal Advisory Services - ELAS) to provide advisory services on debt management to member countries. He had in mind mainly the medium-sized and small countries of the Commonwealth who needed special assistance as they tried to cope with their debt servicing problems. After having identified the need to develop a software for computerizing debt data, the COMSEC approached IDRC for technical help in drawing up the systems specification for the software during the second half of 1983. The positive response from IDRC to this request led to further technical involvement and financial support during the development phase. This collaboration was extended to the field testing of the software and staff training in Sri Lanka in 1985, one of two sites chosen for testing the software. The tenth anniversary of the launch of the software was celebrated in June 1995 when a User Group meeting was held in London.

15. Following this active collaboration during the development phase, IDRC's involvement in the program was confined to providing financial support to selected Commonwealth debt management projects. Notable among these were the financial support provided to the Eastern Caribbean Central Bank Debt Management Project which was used primarily for regional training activities for member countries, the DRMS project in Mozambique which was treated as a Commonwealth country for TA purposes, and the small support for the DRMS project in Fiji whose implementation had to be suspended by TAG when the country left the Commonwealth. None of these activities led to any involvement in providing software support and maintenance which was the responsibility of the COMSEC due to its ownership of the software.

Launching of the IDRC Program

16. The change in this relationship began in 1990 when IDRC was used as a conduit for supplying the software to Thailand. This became possible following the conclusion of a limited Distributor Agreement with IDRC in January 1990. It enabled TAG to undertake a DRMS project in Thailand similar to those in other Commonwealth countries with funding from IDRC and the United States Agency for International Development (USAID). TAG functioned as a consultancy firm for this project. Problems were encountered during project implementation and IDRC took it over and completed the project using a consultant debt specialist and the systems analyst who had been recruited for the DRMS Group in IDRC. This Distributor Agreement was replaced by a broader one in July 1991 which permitted IDRC to use CS-DRMS for projects in developing countries outside the Commonwealth. Projects similar to that in Thailand were implemented by IDRC in Lao PDR with cofinancing from the AsDB and Bulgaria with financing from the World Bank which used Japanese Grant Funds provided for this purpose. Both these projects were implemented by the same team that was responsible for the project in Thailand. IDRC's role in the DRMS project in Bulgaria was essentially that of a consultancy firm but only direct project costs were charged. The English version of CS-DRMS was used in all three countries.

17. When the decision was made by IDRC in 1990 to launch its own program with objectives similar to that of COMSEC, \$528,750² was appropriated to meet the expenses of the in-house DRMS Group. The intention was to use the CS-DRMS software in each project. Following the appropriation of funds, the support of IDRC management for the program waned due to changing priorities in the organization and person-year restrictions. This led to a decision that staff for the DRMS Group should be hired by seeking external funding. In due course, CIDA support of \$649,200 was obtained for DRMS projects in Benin, Cameroon and Mali on the understanding that a French language version will be produced for use by these countries. Further allocations of \$128,483 and \$385,518 were approved by CIDA and IDRC respectively in 1994 making a total of \$1,591,951 for the four year period 1991-95. Another allocation of \$244,105 was approved by IDRC in 1995 to enable the program to be continued up to the end of 1996 and complete the three projects. It should also be noted that IDRC decided not to implement comprehensive DRMS projects unlike the COMSEC. Instead it chose to focus on the software installation and training in its use and provided assistance in data compilation, data input and the production of CS-DRMS reports for use by DMOs. This was for the reason that the Information Sciences and Systems Division only had a mandate to assist countries to establish and maintain information systems. This was a rational position since a loan database is an information system. Any advisory services beyond this to include debt portfolio analysis and policy were deemed to be activities for the Social Sciences Division. This could not have been realized given the operational nature of debt management.

18. The understanding reached between IDRC and COMSEC was that IDRC will be responsible for the maintenance and support to CS-DRMS sites in its project countries. COMSEC's responsibilities were to release upgrades and documentation and fix bugs, where possible, for which end users were

². \$ refers to Canadian dollars.

required to pay an annual license fee of L700 adjusted for changes in the UK Consumer Price Index since 1991. It is worth noting that a more commercial attitude was adopted by the COMSEC towards IDRC in the post-1990 period which made it difficult to develop a genuine partnership between the two institutions in spite of the support that had been provided by IDRC to the development of CS-DRMS and some Commonwealth DRMS projects.

19. In fulfillment of its obligations to produce a French language version of CS-DRMS under the agreement with CIDA, IDRC entered into an agreement with COMSEC to produce a language independent version. When this development work was completed, COMSEC provided IDRC with the program messages of CS-DRMS, including user prompts and menus, input screens, processor action messages, help screens and error messages and reports produced by CS-DRMS which had been identified by IDRC as requiring translating into French. The translations were then sent to COMSEC for integration into the software and the release of a French language version of CS-DRMS. All CS-DRMS manuals were translated into French by IDRC. All costs of the French version were met from the joint CIDA/IDRC program.

20. In terms of the agreement, COMSEC will provide IDRC with the text of new program messages and reports and new documentation that may result from any software changes. IDRC is required to provide the French translations to the COMSEC within a specified period for compilation into a new French version. If it does not choose to make these translations, the older French version will not be supported when the COMSEC decides not to support the language independent version on which it is based.

Pricing and Program Difficulties

21. In the meanwhile, COMSEC entered into another Distributor Agreement in April 1993 with the Crown Agents in London for the use of CS-DRMS in debt management projects. It has been interested in marketing the software for comprehensive debt management projects based on the COMSEC model but its marketing activities have not yielded any projects to date³. One problem faced by the Crown agents in marketing the product has been the licensing fee US\$100,000 and an annual support fee of US\$20,000 for three years, both to be adjusted annually for changes in the UK Consumer Price Index. The fee levels are to be renegotiated with the COMSEC every three years. It appears that the fees have caused difficulties for the Crown Agents although the COMSEC has indicated its willingness to negotiate the licensing fee on a case-by-case basis. It is understood that it has been reduced to US\$25,000 for Nepal and Cape Verde. This case-by-case approach makes it difficult for the Crown Agents to market the software because there is no definite price. Were these projects to be implemented by IDRC, and there were opportunities to do so, the licensing and annual support fees would not be payable as the Distributor Agreement allows IDRC to use the software without charge in developing countries. The only obligation would be an annual license fee of L700. If IDRC was a competitor, which it was not, the Crown Agents would not have been operating in a level playing field.

³ It appears that contracts for DRMS projects in Nepal and Cape Verde will be forthcoming in 1996.

22. Discussions took place between IDRC and COMSEC regarding the use of CS-DRMS in countries other than non-Commonwealth developing countries. The Distributor Agreement concluded in July 1991 stated that a fee to be determined by the Secretariat will apply in these cases. These countries, called Special Category Countries such as those in the FSU and Eastern Europe, will be charged a software licensing fee of US\$100,000 and an annual support fee of US\$20,000 for three years as in the case of any country which obtained the software through the Crown Agents. However, unlike in the case of the Crown Agents, only a part of these fees will be remitted to the COMSEC, with IDRC permitted to retain US\$56,000⁴. It is also free to negotiate the annual support fee that will be applicable from the fourth year onwards and retain the full amount. Further, if any of these projects are to be funded by CIDA, IDRC or the Department of Foreign Affairs, the charges would not apply and only the annual license fee of L700 would be payable. These fee levels were based on the understandings reached at the discussions which took place in September 1992. They were not embodied in an agreement which was left for a later date. If they are, an IDRC project in Kazakhstan funded by CIDA will not be subject to the fees. They will be payable if funded by the World Bank though IDRC could retain US\$56,000. If the Crown Agents implement this project with funding from the World Bank, the fees are payable by the client country and the full amount has to be remitted to the COMSEC. Again, if IDRC is a competitor, which it is not, the Crown Agents would continue operating in an uneven playing field. The fees that would be payable by a country for the installation of the French version by the Crown Agents would presumably be the same as for the English version. It is not known whether IDRC will receive a share of these fees in view of its funding the production of the French language version. These have not been covered in any of the agreements.

23. The decision to seek funding for the IDRC debt management program from CIDA led to the geographical focus of the program shifting to Francophone Africa although this was not the intention when the program began in 1990. Nevertheless, IDRC did not shut the door to projects in other regions but did not seek them. The consultant is aware of several such project opportunities. The possibility of a DRMS project in Nepal has been around for many years. The AsDB approved \$418,000 for a TA in debt management for Vietnam. Although IDRC implemented DRMS projects in Lao PDR and Thailand, it chose not to express any interest in the project. It is understood that Vietnam will use the DMFAS software. The regional debt management project in Belarus, Moldova and Ukraine which is funded by Canada and executed by the World Bank could have included the CS-DRMS software but IDRC chose not to express any interest. All three countries have since chosen the DMFAS software although the Crown Agents made a late attempt to market CS-DRMS in Ukraine and Moldova. A request to IDRC by the Ministry of Finance in Argentina to demonstrate the software was turned down for the reason that there were no funds for it and the Ministry was referred to the COMSEC in London. At the prompting of the World Bank, a proposal was submitted for the Romania DRMS project. This was not followed up with any great enthusiasm and the project was implemented by UNCTAD. Thus IDRC was not active even in the limited role that it chose to play of providing the software and training in its use except in Francophone Africa.

4

15 percent of the license fee of US\$100,000 can be retained by IDRC plus 50, 70 and 85 percent of the annual support fee of US\$20,000 in years 1, 2 and 3 respectively. These total US\$56,000.

24. The Crown Agents, on the other hand, hired a former Systems Manager in the COMSEC (who has since left) and began with a major study to identify possible markets in the Summer of 1993. Attempts were made to market CS-DRMS in countries of Eastern Europe but these efforts bore no fruit. Thereafter, the Crown Agents adopted a very cautious attitude and only marketed the software at regional seminars held in Sofia and Tashkent in 1994 and undertook country visits only when these were paid for by the British Know-How Fund. The Crown Agents is handicapped in these marketing efforts by the unavailability of a person fully knowledgeable about the software. The team that made the presentation in Ukraine had to refer six questions raised by participants at the demonstration to the COMSEC and it took several months to provide the response. The COMSEC may well state that the Crown Agents did not recruit two staff members to work on the program as required in their Distributor Agreement. It has been unwilling to do this until there were good prospects of contracts for DRMS projects.

25. These attempts at marketing CS-DRMS took place during a period when the Commonwealth market had been almost saturated except for a handful of countries. In the 1990s, the World Bank was urging all countries to review both CS-DRMS and DMFAS before making a decision on the software. During recent consultations with World Bank staff, it was pointed out that countries outside the Commonwealth did not have two products to choose from. UNCTAD provided the full range of debt management advisory services to all countries as did the COMSEC for the Commonwealth countries. The Crown Agents offered to provide the full range of services to all countries but it was confronted with an indefinite pricing situation and a reluctance to spend any more of its funds seeking markets. IDRC on the other hand was offering limited services related to the installation of the software and training in its use and that too in a particular geographical area.

26. Another feature of COMSEC assistance in debt management that set it apart from both UNCTAD and IDRC is that its support did not end with the completion of a DRMS project. Although its projects had a finite implementation period but contacts with Ministries of Finance and Central Banks continued at least once an year through the forum of the Commonwealth Finance Ministers and assistance in debt management has continued in some countries even though the DRMS projects had ended. UNCTAD and IDRC can only do so within the framework of a new project. This is an important point that is forgotten and is probably one reason why the COMSEC debt management program reached a larger number of countries although it started later than the UNCTAD program.

IDRC at Cross Roads

27. The IDRC program has reached the stage where the French language version has been developed and installed in Benin, Cameroon and Mali and the databases are at various stages of completion. IDRC has agreed to provide maintenance and technical support to users of CS-DRMS in terms of licensing agreements signed with these countries. Project requests have been received from Burkina Faso, Niger and Senegal which are under the umbrella of Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO), Chad and the Central African Republic which are under the umbrella of Banque des Etats de l'Afrique Centrale (BEAC), and Cape Verde. BCEAO has made requests to UNCTAD and IDRC for the installation of debt management software and it appears likely that both will be

installed. In this event, the interface between the two software has to be addressed. The consultant has ascertained that requests have also been submitted by Chad, the Central African Republic and Senegal to UNCTAD. The Central African Republic has even been listed by UNCTAD as a pipeline project. The project request from Cape Verde has been handed to the Crown Agents for submitting a proposal and is no longer in the IDRC pipeline. Given the tendency of countries to submit requests to more than one donor, four countries, ie. Burkina Faso, Niger, Senegal and Chad, could be treated as potential sites for the installation of CS-DRMS.

28. The funds that have been provided by CIDA and appropriated by IDRC will be adequate to complete the three projects currently under implementation. CIDA's West Africa Division has informed IDRC that funds will not be available for a second phase of their joint program. IDRC's program priorities indicate that no funds will be available for new project activities when the current appropriation is used up. Thus IDRC has to decide whether it should to wind up the program or market it aggressively and secure funding for projects from clients or other funding agencies. The main purpose of this consultancy has been to examine the various options available to IDRC.

OPTIONS

Closure of the Program

29. Closure of the program is one option that is available to IDRC. While this may appear to offer the easiest solution to IDRC it is not without cost. In terms of the licensing agreements signed between IDRC and Bulgaria, Lao PDR and Thailand (which has the English version of the software) and Benin, Cameroon and Mali (which has the French version of the software), IDRC has agreed to provide support and maintenance to CS-DRMS on condition that the latest version of the software is in use and license fees due annually have been paid. In the event of closure of the program, IDRC could decide to walk away from this responsibility. A major protest can be anticipated from the COMSEC since this will bring its software into disrepute for action bordering on irresponsibility. Further, protests can also be expected from user governments for misleading them with promises of support. Such a course of action will certainly tarnish IDRC's image.

30. On the other hand, IDRC could decide to transfer the responsibility for providing software support. It will certainly be possible for the COMSEC to provide new releases, bug fixes and remedial maintenance to users of the English version of CS-DRMS, ie. Bulgaria, Lao PDR and Thailand, on condition that the annual license fee is paid and the latest version of the software is being used. If additional systems support is needed, COMSEC would be able to provide this service on a cost recovery basis though the priority assigned to work outside the Commonwealth will naturally be lower than for member countries. The consultant was able to ascertain COMSEC's willingness to take on this responsibility.

31. The position regarding the French version is different. The COMSEC has no French language capability and cannot be expected to provide similar support to Benin, Cameroon and Mali. Cameroon is now a Commonwealth country and software support to it can be transferred to the COMSEC provided the English version is installed instead of the French. The feasibility of this proposal has to be examined. Responsibility for software support for the French version has to be passed on to another institution, preferably one in the region such as the BCEAO or the African Development Bank (AfDB). The development of a resource centre in West Africa that had been anticipated at the time the joint CIDA/IDRC program was launched has not materialized as yet. This was a World Bank initiative to establish an organization similar to the Eastern and Southern Africa Initiative on Debt and Reserves Management (ESAIDARM). Such a centre would have been a suitable institution to which software support could have been transferred. In the absence of one, an institution has to be identified which would accept this responsibility. The COMSEC laid out some requirements for such an institution. These are that it should have a commitment to the debt management program, be steeped in the debt culture, be willing to assign a debt specialist and systems analyst who should be fully familiar with all the features of the software, and provide an adequate budget for staff to travel to project countries. If a suitable institution can be identified and persuaded to perform this task, it will probably need funding from IDRC and/or other donor sources to finance its operations. It is difficult to envisage a regional operation of this type which would cost less than US\$150,000 annually. It would probably cost more because of the additional responsibility that it will have to bear for the French language translations of program messages and reports in the software and documentation in relation to updates. Further, no time limitation can be set on the period for which this support will be required. The possibility of transferring responsibility for software support and maintenance to a commercial firm in the region has also been mooted from time to time. This idea has not been explored in any depth but it is difficult to visualize such a proposal reaching fruition due to the financial and legal implications.

32. A proposal similar to the resource centre would be for the three Francophone countries, ie. Benin, Cameroon and Mali, and possibly the BCEAO to establish a cooperative entity among themselves to provide mutual software support and maintenance and take responsibility for dealing with the French translations of the software. This will require funding for as long as the countries continue to use CS-DRMS hopefully through contributions from each country, the negotiation of an agreement with the COMSEC to cover the legal and financial aspects and a full appreciation of the responsibilities relating to the French version. This idea has not been explored with any of the countries to ascertain its feasibility or with the COMSEC. It could be pursued if it does not lead to an open ended financial commitment for IDRC.

33. Another proposal made was that IDRC should consider assisting countries to convert from CS-DRMS to DMFAS. This option should only be offered to Benin, Cameroon (if the installation of the English version is judged not to be feasible) and Mali. These conversions could cost approximately US\$200,000⁵ each including the cost of hardware and proprietary software that will be required for the new version 5.0 of DMFAS. It may be possible to negotiate a better price with UNCTAD for their

⁵This is based on a budget submitted by Ukraine for the installation of version 5.0 of DMFAS. US\$100,000 is estimated for the purchase of hardware and proprietary software for version 5.0.

services for the three countries. A requirement here will be to develop an interface to convert the database from CS-DRMS to DMFAS as these countries will be unwilling to enter loan data once again into DMFAS. No estimates are available of what this might cost.

34. If closure is seriously considered and IDRC wishes to make a clean break from the debt management program, it is recommended that responsibility for providing software support and maintenance be passed on to the COMSEC in Bulgaria, Cameroon (only if installing the English version is feasible), Lao PDR and Thailand. In Benin, Cameroon and Mali, negotiations should be conducted with these countries and UNCTAD with a view to assisting their conversion from CS-DRMS to DMFAS. As stated earlier, an interface for data transfer may be necessary. If it wishes to close the program without making a clean break, one institution has to be identified in either the public or private sector or a cooperative entity encompassing Benin, Cameroon and Mali and possibly BCEAO to take on the responsibility for software support and maintenance of the French version. IDRC will then have to deal with requests for continuing financial support from this institution. Whatever arrangements are made, it is likely that the COMSEC will be unhappy about the decision to close the program because of the perception that may be created amongst users that this was due to some negative feature in the software.

35. The implications of closure were known to IDRC at the time it decided to use CS-DRMS for projects of its own. Its further commitments in relation to the French version were also known. Thus IDRC was fully aware of the situation outlined in this section though the various options may not have been explored earlier.

Active Marketing of CS-DRMS

36. A decision to market the product actively should not be taken lightly. It requires a commitment from IDRC to make a clean break with the past and re-launch its debt management program by addressing some of the problems that affected it adversely in the first half of the 1990s. Several issues need to be discussed in this section. They are the following:

- the product and services that IDRC wishes to include in its debt management projects and market,
- the institutional mechanism for the delivery of services. Should the program be delivered through IDRC, a Secretariat within the organization operating with a degree of autonomy, a joint venture agreement with the Crown Agents or an agency outside IDRC, either in the public or private sector?,
- composition of the DRMS Group,
- the pricing of the software and support services and its impact on the cost of projects that will be implemented and the relationship between the Crown Agents and IDRC in the marketing of debt management projects, and
- a brief review of the potential markets.

Product and Services

37. It is recommended that DRMS projects should include all the elements listed in the section above on Scope of Debt Management Projects. These are providing assistance for defining the TOR of the DMO, preparing job descriptions of staff and assistance in building up the office; formulating an appropriate legal, institutional and administrative framework for the mobilization, negotiation, utilization and repayment of external loans and the issue of government guarantees for external borrowings; establishing administrative arrangements for the collection of data on all external loans at a central location to facilitate the creation of a loan database; supplying and installing the CS-DRMS software to be used for the storage, retrieval and analysis of debt data, supplying hardware and proprietary software necessary for the use of CS-DRMS and providing 'hot line' support for users of CS-DRMS; and training in all aspects of debt management including the use of CS-DRMS for debt portfolio analysis based on the requirements of the country. Unlike in the past, the focus should shift to the advisory aspect of projects and staff should be recruited accordingly.

38. Furthermore, it is the consultant's view that the projects should go beyond the traditional mould of DRMS projects that were implemented by the COMSEC. The need for integrating domestic and external debt of the public sector through appropriate has been mentioned earlier. The development of an on-lending module which is linked to the loans that are used for such lending is another requirement. Further, the need for an interface with cash management, loan accounting and foreign exchange management software that may or will be installed in Ministries of Finance and Central Banks have to be addressed by the project team. These additional items should be included to demonstrate that IDRC is taking account of the evolving needs of client countries.

Delivery Mechanism

39. Past performance shows that IDRC has not been able to deliver effective advisory services in debt management. The provision of these services requires IDRC to operate as a consultancy agency in the manner that TAG (now known as ELAS) has done since the 1960s. Decisions on projects have to be made expeditiously without reference to cumbersome institutional approval procedures. If a Ministry of Finance wishes to obtain advice on a loan proposal or some forecast difficulties in making debt service payments, the request has to be acted on promptly. When a demonstration of the software is requested, it has to be dealt with in the same manner. Unless IDRC (in its new incarnation) demonstrates that it is capable of responding in this manner, the institutional mechanism for the delivery of these advisory services should be outside its framework.

40. Much time and effort have been spent by IDRC in negotiating Distributor Agreements with the COMSEC for the English and French language versions. The institutional mechanism adopted for the DRMS program should benefit from these investments. Those who were involved in these negotiations will testify to their laborious nature. In view of this, it is recommended that a Secretariat be set up for the delivery of the DRMS program with a legal link to IDRC to enable it to operate under the same Distributor Agreements. At the same time, the DRMS Group should be able to operate autonomously in making project decisions, subject to IDRC's financial regulations. If for any reason, it is found that a Secretariat cannot have the legal link to IDRC or function autonomously, other possibilities should be explored. The legal link may not be a compelling argument since the

Distributor Agreement would have to be renegotiated when IDRC or a secretariat within IDRC begins to market DRMS projects commercially. This would be necessary both to take account of the new environment and iron out some of the issues discussed in the section on Pricing and Program Difficulties.

41. Partnership arrangements are possible with other agencies such as the North-South Institute, the Crown Agents, a software firm in the private sector and a non-governmental agency. None of these have been explored but remain theoretical possibilities. A Distributor Agreement would have been negotiated between the COMSEC and the new entity. The outcome of these negotiations cannot be forecast particularly in regard to the license and annual support fees. Any one of the delivery mechanisms proposed would have to be self sustaining and generate revenue in the long-term. Whatever mechanism is selected, there will be a need for start up costs at an appropriate level for 1-2 years.

Composition of the DRMS Group

42. Equally important is the composition of the team that will constitute the DRMS Group. In view of the urgency of re-launching the DRMS program without any loss of time, it should be headed by a person who is well known internationally in the field of debt management. The **Project Manager and Head of Group** should be a debt specialist. In addition to working directly on DRMS projects, the Head of group should be responsible for program management and promotion, liaison with international agencies providing TA in debt management such as the COMSEC, UNCTAD and World Bank, fund raising for projects and preparing project proposals, and communications with heads of Ministries of Finance and Central Banks in client countries. The Group will also need a full-time **Debt Specialist** whose time will be devoted entirely to DRMS projects. The Debt Specialist will be required specifically to undertake assessments of the debt management requirements of countries seeking assistance and prepare reports setting out the framework for implementing DRMS projects, advise on the collection and organization of loan data, and carry out non-systems related training in debt management in close coordination with the systems staff. The Group will need the services of a **Systems Manager** who will be the principal link with the COMSEC on systems issues and be responsible for managing the distribution of CS-DRMS to client countries. The Systems Manager will organize all systems related training in coordination with the Debt Specialist, arrange for the provision of client support services to users of CS-DRMS, and establish procedures for reporting bugs, problems and requests for new features or other improvements in CS-DRMS to the COMSEC. It is recommended that the possibility of using a member of the Management Information System staff in IDRC on a half time basis for this position be explored. The Group will also need the services of a full-time **Systems Analyst**⁶ to participate in assessments with the Debt Specialist, carry out installations of CS-DRMS including setting up systems management procedures, carrying out systems related training required for DRMS projects, and reviewing the requests made for interfaces with other financial systems which are in operation or being developed at user sites and making proposals for meeting these requests. It is hoped that the Systems Analyst will work closely with the Debt Specialist in using the management tools in CS-DRMS and assist in preparing portfolio analyses. The Group

⁶. Hiring of the Systems Analyst could be delayed for six months without impeding the program.

should be supported by an efficient **Administrative Secretary** whose responsibilities will include the monitoring of all projects under implementation, the provision of logistics support that will be required for field missions from Ottawa, particularly for training missions, and ensuring that the administrative and financial requirements set out for the Group by IDRC and funding agencies are met. It is intended that project staff will be relieved of the tedium of administrative and financial reporting by the Administrative Secretary. If a staff member at a higher level is necessary to perform this task, this proposal should be modified accordingly.⁷ The team should be able to operate with credibility in the field of debt management. In view of this, persons with relevant experience should be recruited for the positions.

Pricing

43. The pricing issues set out in the section on Pricing and Program Difficulties should be resolved by IDRC and Crown Agents with the COMSEC. The price for a client should be the same irrespective of the distributor or the source of financing of the TA. In a perfect market situation, IDRC would have been swamped with requests from non-Commonwealth countries as it provided opportunities for clients to obtain a cheaper product. This did not happen for the reason that IDRC was a reluctant distributor of CS-DRMS (as was the Crown Agents) and chose to restrict its retailing activities mainly to Francophone countries in Africa. Thus many countries were unaware of the opportunity to obtain CS-DRMS through IDRC.

44. The other issue is the level of the license fee of US\$100,000 and the annual support fee of US\$20,000 for the first three years. The consultant is unaware of the basis on which these fees were fixed. It is his view that they are excessive and would tend to persuade prospective clients to look at other software. The fact that no contract was concluded by the Crown Agents in nearly three years should convey a message from the market. The pricing and poor marketing of the product and the absence of a team at the Crown Agents to provide advisory services in debt management were contributory factors although the quality of the product has been established by its use in multiple countries. The COMSEC should re-examine its revenue objectives in licensing two distributors for the CS-DRMS software. It is unrealistic to attempt recovery of past software development costs and negotiate the licence fee on a case-by-case basis. This makes it impossible for any distributor to market the product effectively. It is therefore recommended that IDRC concludes an agreement with the COMSEC to pay a lower fee level such as one-quarter of those set out in the agreement between the COMSEC and Crown Agents and also a percentage of any profit, possibly 10 percent, determined ex post, that will be made from future DRMS projects. This will enable IDRC to cost projects on a more competitive basis when tendering for DRMS projects.

45. Debt management projects provide an opportunity for IDRC to make a profit on its operations. Costs could be recovered in the basic price of DRMS projects. Two options are available for generating revenue. One, which is safer, is to add a profit margin to the costs. The other is to negotiate an additional fee which will be a percentage of the savings in penalty payments over, say,

⁷ Job Descriptions for the positions in the DRMS Group have been written up in the report prepared by the Consultant in August 1994 entitled 'IDRC/CIDA Debt Management Program Phase II'.

the first five years of project operation. This could be a more attractive proposition to the client but the return to IDRC will be uncertain and involves it in monitoring the savings that accrue to the concerned government.

Prospective Markets

46. The countries that are potential clients for DRMS projects fall broadly into four groups. These are,

- a) countries that do not report to the World Bank's DRS and wish to computerize their loan data to assist in reporting,
- b) countries that do not report satisfactorily to the DRS and wish to computerize their loan data to improve their reporting,
- c) countries that report satisfactorily to the DRS manually and wish to computerize their loan data due to the increasing size of their database and improve its management, and
- d) countries that have computerized their loan database but do not report to the DRS satisfactorily and wish to consider a change in the software to improve their reporting and management.

47. A complete analysis of the countries into these four categories will not be possible due to the confidentiality of the reporting status to the World Bank. Published data in the World Debt Tables list the countries that do not report to the DRS (category (a) in the preceding paragraph). The others are classified as,

- reporting satisfactorily either manually (category (c) in the preceding paragraph) or electronically,
- reporting partially and the data has to be supplemented by information from other sources or staff estimates, and
- not current in their reporting requiring a significant element of staff estimation in preparing debt data for the World Debt Tables.

The last two categories correspond to categories (b) and (d) in the preceding paragraph.

48. The countries that do not report to the DRS⁸ are Afghanistan, Antigua and Barbuda, Bahrain, Cuba, Gibraltar, Greece, Iraq, Kiribati, Korea (Democratic People's Republic of), Libya, Macao, Namibia, Netherlands Antilles, New Caledonia, Saudi Arabia, South Africa and Surinam. Among these, Antigua and Barbuda and Namibia have CS-DRMS installed and it is possible that they do not report to the DRS as they do not borrow from the World Bank. It is understood that the COMSEC has completed an initial assessment of South Africa's debt management requirements and is reporting it as a pipeline project. Iraq is in non-accrual status to the World Bank and not eligible to borrow. Any prospects for a project will depend on its return to the international community. The needs of Kiribati are best taken care of under the COMSEC/AsDB regional debt management project for the South Pacific. The consultant is aware that **Surinam**⁹ had requested a demonstration of the CS-DRMS

⁸ World Debt Tables, Volume I, 1994-95, page 185, The World Bank.

⁹ Potential markets are in bold letters in the text.

software but there had been no follow-up. It is the consultant's view that this is the only country in this group that offers the prospect of a project at this stage. Nothing is known about the availability of funding but it is unlikely to offer prospects of a commercial project. Afghanistan, Cuba and Korea (Democratic People's Republic) are possibilities down the road as TA rather than commercial projects.

49. The countries of *South Asia, East Asia and the Pacific* report satisfactorily to the DRS with the exception of China, Malaysia and Republic of Korea who report partially. All three countries borrow from the World Bank and will be looking for opportunities to improve their reporting. **China** has no computerized system and should provide an opportunity for a DRMS project unless plans are afoot to develop its own system. The consultant is aware that the Bank Negara Malaysia showed no interest in CS-DRMS in the 1980s and proceeded to develop its own software. Since it does not appear to have led to adequate reporting, **Malaysia** could be a possible market though not an easy one to obtain. **Republic of Korea** is reported to have its own system which appears to have limitations. This is a market that should be investigated. It should be recognized that both Korea and Malaysia are active borrowers in the capital markets and will probably look for customized software to meet their needs. Among the countries that are reporting satisfactorily, Bhutan, Cambodia, Mongolia, Myanmar and Nepal have not computerized their loan data. The loan inventories in Bhutan, Cambodia and Mongolia are too small to warrant computerization at this stage. Further, it appears that the Crown Agents is actively pursuing a DRMS project in Nepal with funding from the Overseas Development Administration in the UK. This leaves **Myanmar** as a prospect with possible funding from an AsDB TA, once loan operations begin in the country. In the case of **Cambodia**, it is understood that funds have been earmarked for a debt management project from a World Bank Technical Assistance loan. This should be pursued with the International Finance Division and the relevant Country Operations Department in the East Asia and Pacific Region of the World Bank. **Mongolia** could be a project prospect in the future.

50. Of the 29 countries reporting to the DRS from *Latin America and the Caribbean*, 14 use the DMFAS software, 9 the CS-DRMS software and the remaining 6 use their own software or a spreadsheet. Bank staff makes substantial estimates of the debt in Argentina and Haiti among DMFAS users, though the situation in Argentina is expected to improve with the installation of version 5.0. Guatemala provides partial reports to the DRS. It is not known whether the situations in Guatemala and Haiti warrant a change in the software or more training of staff to improve usage of DMFAS. Only St Vincent and the Grenadines among the 9 CS-DRMS users are not current in their reporting. The six countries who do not use DMFAS or CS-DRMS report satisfactorily to the DRS with the exception of **Brazil** which reports partially. Its own system may not be functioning satisfactorily and it is worth making inquiries about the problems. It should however be recognized that Brazil has a large loan database, well in excess of 3000 loans. Thus IDRC may not wish to be involved in a project with such a large number of loans where the problems of data capture may be significant. **Uruguay** was reported to be using a spreadsheet to report its debt. If no steps have been taken to computerize loan data using a software with forecasting capabilities, Uruguay should offer a project prospect to IDRC. **Venezuela** did not have an adequate software two years ago. The Crown Agents marketed the software there but did not succeed in obtaining a contract. Inquiries should be made of the action taken to meet its requirements.

51. Ten countries report to the DRS in *North Africa and the Middle East*. Of these only Egypt and Yemen do not report adequately to the World Bank. With DMFAS becoming fully operational in Egypt this situation will undoubtedly improve. Lebanon too has installed DMFAS. Syria is in non-accrual status with the World Bank. Yemen may offer prospects of a DRMS project but only as a TA activity. The Crown Agents marketed CS-DRMS in both Oman and Tunisia which are reported to be developing their own software. The other countries are reported to have their own software.

52. In the 45 *Sub-Saharan countries of Africa* reporting to the DRS, 15 have installed CS-DRMS and 11 have installed DMFAS. Among the countries using CS-DRMS, only Mali, Malawi and Swaziland report partially, probably for the reason that the projects began only recently. Reporting by Nigeria requires considerable estimation by World Bank staff for the reason that data collection is difficult. In the countries using DMFAS, Zambia is reporting partially while considerable staff estimates are required for Rwanda probably due to the unsettled conditions in the country. Of the nineteen countries which do not use CS-DRMS or DMFAS, debt reporting by Cape Verde, Equatorial Guinea, Liberia, Seychelles, Somalia, Sudan and Zaire require considerable estimation by staff while Guinea provides partial estimates. Cape Verde is considering a proposal by the Crown Agents for a debt management project which includes the CS-DRMS software. It could be financed by a World Bank Credit for Improving Public Sector Management which has a component for strengthening economic management capacity. Liberia, Sudan and Zaire are in non-accrual status to the World Bank while the political conditions in Somalia rule out prospects of a DRMS project. Seychelles has not requested the COMSEC to implement a DRMS project, probably because of the small size of its loan inventory. There is no reason to believe that it would approach IDRC for a project which would require financing by another agency while this would not be necessary if the request is made to the COMSEC. This leaves Equatorial Guinea and Guinea from this sub-group of countries. **Equatorial Guinea** has a small database and it was reported that it had obtained a copy of the software used in the Congo which was developed by the French firm SIGNE. It is understood that this is not in use which should make it a candidate for a DRMS project. Similarly, it is reported that a software developed by the French firm SEGOS in use in Guinea, which has a larger loan inventory, requires upgrading. This should make it a candidate for a DRMS project though undoubtedly Guinea will wish to compare the cost of upgrading its current software with the cost of a DRMS project.

53. The other countries in Sub-Saharan Africa are Angola, Burkina Faso, Chad, Comoros, Congo, Cote d'Ivoire, Gabon, Madagascar, Niger, Sao Tome and Principe and Senegal. Angola is reported to have its own system and provides satisfactory debt data to the World Bank. **Burkina Faso** reports satisfactorily to the DRS manually and has requested IDRC for the installation of the CS-DRMS software. A possible source of funding for such a project could be a second Structural Adjustment Credit (SAC) which has yet to be approved. Chad has made requests to both IDRC and UNCTAD for debt management projects as computerization is considered to be a priority. Price could be the determining factor in deciding between UNCTAD and IDRC but the source of funding is uncertain. **Comoros** has a small loan inventory and reports satisfactorily to the World Bank. It should provide an opportunity for a DRMS project with possible funding from a second SAC that is reported to be in the pipeline. Congo, which reports its debt satisfactorily to the World Bank, has its own computer program developed by SIGNE. Cote d'Ivoire is in a similar situation and is unlikely to be a prospect for a DRMS project. **Gabon** reports its debt satisfactorily using a software that was developed in the

1980s by SGB0. It is understood that a need exists for a more user friendly software which may provide an opportunity for a DRMS project. Madagascar has its own system developed with assistance from UNCTAD in the 1980s. It reports satisfactorily to the World Bank and any upgrading of the software will probably be done by UNCTAD. Niger is understood to need a satisfactory debt management software although it reports debt data satisfactorily to the World Bank. The present system was developed by SIGNE and probably needs upgrading. An Institutional Development Loan from the World Bank which is in the pipeline may be a source of funding for a DRMS project. Sao Tome and Principe has a small loan inventory and reports satisfactorily to the World Bank using a spreadsheet. It should provide an opportunity for a DRMS project but the source of funding is uncertain. A third SAC is in the pipeline but it is geared to support private sector reforms. Senegal has its own software which needs upgrading. It has made requests to both IDRC and UNCTAD. It reports its debt data satisfactorily to the World Bank. There is a possibility of a DRMS project in Senegal but as in the case of Chad, price could be a determining factor. The funding for the project is uncertain.

54. *Eastern Europe and Central Asia* provide a number of opportunities for DRMS projects. The countries outside the FSU, ie. **Albania, Bulgaria, Croatia, Czech Republic, Hungary, Macedonia, Poland Romania, Slovak Republic and Slovenia**, all report debt data satisfactorily to the World Bank. The only exceptions are Serbia and Bosnia-Herzegovina. Bulgaria had CS-DRMS installed at its Foreign Trade Bank and DMFAS at the National Bank in Romania. The Crown Agents marketed CS-DRMS in the Czech and Slovak Republics but no projects materialized.

55. In the FSU countries, the Russian Federation is developing its own software. Belarus, Moldova and Ukraine which report partially to the World Bank have decided to use the DMFAS software. In the Baltics, Latvia and Lithuania, with funding from Sida have decided not to use either CS-DRMS or DMFAS and are looking at commercial options. Estonia has decided to use DMFAS though the funding for it has not been obtained. All three countries report partially to the World Bank. **Kazakhstan** is a potential client for a DRMS project with funding from both CIDA and USAID. The other countries, ie. **Armenia, Azerbaijan, Georgia, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan** either report partially or their reports require considerable estimation by World Bank staff. The British Know How Fund is funding an initial assessment in Azerbaijan while holding out the prospect of funding a DRMS project at a later date. At this stage of their post-independence history, some of these countries have small loan inventories. Nevertheless, they are all possible clients for DRMS projects in the future.

56. A full analysis of the potential market for DRMS projects would require information on the latest reporting status to the DRS based on end-1995 data. An indication of the priority assigned to debt management in these countries will provide some guidance about the availability of funds for DRMS projects. Access to World Bank reports on Structural Adjustment loans or credits will provide information on whether the implementation of DRMS projects form part of the agreed program of action. Policy matrices included in Standby Agreements with the IMF will also provide information on the priority attached to debt management in the country. Discussions should be held initially with the country economists at the World Bank followed by the staff of the International Finance Division on the quality of debt data reported by these countries.

57. Based on the brief review in this section, it appears that the following groups of countries offer prospects for DRMS projects which need to be explored in detail. Francophone Africa and Eastern Europe and Central Asia have the largest number of countries that may be potential clients.

Latin America and the Caribbean

Brazil, Surinam, Uruguay and Venezuela

Sub-Saharan Africa

Burkina Faso, Chad, Comoros, Equatorial Guinea, Gabon, Guinea, Niger, Sao Tome and Principe and Senegal

Asia and the Pacific

Cambodia, China, Malaysia, Mongolia, Myanmar and South Korea

Eastern Europe and Central Asia

Albania, Croatia, Czech Republic, Macedonia, Poland, Slovenia and Slovak Republic

Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan

North Africa and the Middle East

Yemen

Is There a Market Among Non-Traditional Clients?

58. The CS-DRMS software has been installed mostly in Ministries of Finance and Planning, Treasuries, Accountant-General's Offices and Central or Reserve Banks. It has served the needs of governments to record all external debt of a country and use the loan database for the preparation of debt reports and analysis for effective debt management. In theory, any public sector borrower in a developing or former centrally planned country could be a potential user of CS-DRMS, although its debt would already be included in the country's loan database. Though some of the data fields would not be relevant to such a borrower, the user could record its borrowings as a government would its borrowings and those of the entire country. Some of the reports in the reports menu would not be relevant for a public sector borrower but these could be ignored and new reports formatted. Nevertheless, in over ten years of its availability, CS-DRMS has been installed in only three such public sector agencies. These were the Bank of Ceylon, Industrial Credit Corporation of India and Electricity Commission of Papua New Guinea. The COMSEC informed the consultant that these three installations were failures and the software is not being used. This does not necessarily mean that a market does not exist among borrowing public sector agencies. As countries liberalize their economies and parastatal agencies borrow abroad without government guarantees, the need for a software to monitor and manage these borrowings will arise. This would certainly be the case in countries with large borrowings. The performance to date with CS-DRMS among these agencies cannot be taken as a guide to future demand. Nothing further can be said at this stage without marketing the software in each such country.

59. The potential exists for any borrower in a developed country to use CS-DRMS. The software could be marketed to provincial governments, regional municipalities and public utilities in Canada.

In these cases, it should be recognized that CS-DRMS will be competing with software that is sold aggressively by private companies. An example is the Alberta Treasury which purchased a securities management program from a Canadian software company and had it customized to serve its needs. There is an annual software support fee of the order of \$1.0 million paid to this company. CS-DRMS has 12 data fields out of 41 that are not relevant for these borrowers. Neither are some of the reports such as those which categorize debt service payments and debt outstanding into government, parastatals guaranteed and unguaranteed, and private sector guaranteed and unguaranteed. It should be stated here that CS-DRMS has the capacity to forecast debt service payments for any type of loan instrument. However, it is the consultant's view that potential users should be shown a software that approximates their needs closely and can be customized to suit them. CS-DRMS requires modifications which should be made prior to marketing to these clients. It will not be sufficient to demonstrate the software in its present state to users with a promise that it will be modified to meet their needs if they express an interest. Further, IDRC cannot set a time frame for such modifications as the source code is the property of the COMSEC and any changes will have to be based on its priorities for undertaking development work. It will be necessary to define user needs for this group of clients including the report and negotiate with the COMSEC to have these changes made for a different version of the software. Support and maintenance of such a version will also be an issue for negotiation with the COMSEC who will have no incentive to maintain this version unless it serves a Commonwealth need which is certainly not the case. This leads to the conclusion that it will be difficult to market CS-DRMS to non-traditional clients unless IDRC can obtain access to the source code.

60. Another possibility is to use CS-DRMS for monitoring lending operations of credit institutions. The software could be used in the same way that borrowings are monitored. The EDC is evaluating CS-DRMS for this purpose. The complicated forecasting of multi currency loans will not be required where the lending is designated in a single currency. Nevertheless, some modifications will be necessary to the data fields and reports to meet the needs of a credit institution fully. The software will be more suitable when the COMSEC develops an on-lending module to enable governments to monitor these loans. Until this is done, the lack of access to the source code will again limit marketing the software to such users. Similarly, CIDA could monitor its grants using CS-DRMS but the software has more features than what is necessary.

TYPICAL PROJECT CYCLE

61. The time taken for a DRMS project depends on a number of factors. These are first, the stage of development of the DMO, its staffing and their capabilities; second, the size and complexity of the country's loan portfolio and whether it had a rescheduling history; third, the number of agencies involved in loan operations and prospects of effective coordination among them; fourth, the computer environment in the country; and fifth, the priority assigned to debt management by the government.

62. A close working relationship should be established between staff of the DMO and executing agency during implementation as the activities to be undertaken have to be shared between the two agencies. Effective coordination is necessary to facilitate project completion in the shortest period of time. The government must meet its commitments regarding project inputs to ensure that the implementation schedule is kept. Another variable that could have an impact both on the cost and implementation period of the project is the assignment of a full-time adviser. In many instances, this has helped to mobilize government resources for the project and provide effective training for national staff.

63. Since the cost of a DRMS project is critical to making a decision on the future of the debt management program, it will be useful to set out a typical project cycle for a country with a medium sized loan portfolio and estimate the external inputs necessary for its implementation. The total elapsed time will vary from country to country as it will depend on the inputs provided by the government which have to dovetail with those provided externally. A full-time adviser is not among the project inputs assumed. Project implementation is assumed to take place through short-term consultancy and government inputs.

64. Based on the consultant's past experience with DRMS projects and consultations with the COMSEC during this assignment, the external inputs required for a typical project after a government has decided to use the CS-DRMS software following a review of the available software are set out in Table 1. This is based on the COMSEC model rather than the shorter cycle proposed by the IDRC DRMS Group. The budget implications of the latter are set out in Annex 4. The inputs may be considered to be excessive but given the normal experience of delay in implementation, the consultant recommends caution in making budget estimates. Otherwise, a significant contingency has to be added. Project implementation may grind to a halt for a variety of reasons and the only way forward is to mount a mission to assess the nature of the problem.

65. Government inputs should be mobilized to dovetail into the external inputs listed in Table 1 for the following activities:

- review available software and make the decision to use the CS-DRMS software and invite the implementing agency to conduct an assessment of the country's debt management needs. This should be done before activity (a).
- discuss the assessment report with the implementing agency at activity (c) or send written comments.
- complete data entry sheets. This takes place between activities (d) and (g).
- purchase hardware and proprietary software required for the DRMS project. This could take place anytime between activities (c) and (f). If the purchases have not been made by the time activity (g) is undertaken, hardware and proprietary software should be rented for the training.
- data entry. This should take place between activities (g) and (i).
- auditing completed database. This could take place any time after step (i).

Table 1

| Activity | Debt Specialist (weeks) | Systems Analyst (weeks) |
|---|----------------------------|----------------------------|
| a) Initial Assessment | 2 | 2 |
| b) Preparation of Report | 2 | 1 |
| c) Discussion of Report with Government ¹⁰ | 1 | 1 |
| d) Training in Data Collection (Data Entry Sheets) | 2 | 2 |
| e) Review of Completed Data Entry Sheets ¹¹ | 2 | - |
| f) Installation of Software and Training in Systems Aspects | - | 2 |
| g) Training in the use of Software ¹² | 2 | 6 |
| h) Review of Progress in Data Entry ¹³ | 2 | 2 |
| i) Review of Completed Database | 2 | 2 |
| j) Training in SQL and Report Writing ¹⁴ | - | 2 |
| k) Training in the Use of Management Tools | 2 | 3 |
| l) Portfolio and Debt Analysis | 4 | 2 |
| m) Final Systems Review and Evaluation | 1 | 1 |
| TOTAL EXTERNAL INPUTS | 22 | 26 |
| ELAPSED TIME | 82 | 82 |

¹⁰ This step could be eliminated but it is recommended that it be included for the purpose of explaining the project proposal and obtaining the government's commitments to the project.

¹¹ This will not be required for small loan inventories or when the DMO has competent local staff.

¹² The training will normally be for four weeks, requiring a total input of six weeks from Systems Staff and two weeks from the Debt Specialist. One Systems Staff will train for the entire period and the other for the last two weeks. The latter will be required when the Debt Specialist leaves after two weeks. The Systems Staff training during the full period may have to spend the week preceding in the country organizing the hardware and software needed for the trainees. The additional week has been provided in the period for the Installation of Software.

¹³ This will not be required for small loan inventories or when the DMO has competent local staff.

¹⁴ COMSEC is tending towards not providing this training in their projects.

66. Based on the activities listed in Table 1, it is estimated that 110 days will be required from a Debt Specialist and 130 days from Systems Staff to implement a DRMS project. These steps can be delivered in 29 weeks if government resources are mobilized in time to undertake the activities listed in the preceding paragraph. Given that the best estimate for data collection and entry for a medium sized loan portfolio is about six months each, an estimate of elapsed time for the project will be 81 weeks, ie. about 19 months.

STAFF REQUIREMENTS

67. During the six years that have elapsed since IDRC launched its debt management program, three projects have been completed in Bulgaria, Lao PDR and Thailand. Three others are being implemented in Benin, Camerouns and Mali. These projects have focussed essentially on organizing, collecting and computerizing loan data. For the purposes of this paper, it has been assumed that 10 projects will be implemented during a five year period. If the program is successful, it is expected that the implementation of several more would have begun by the end of this period. These projects are assumed to be comprehensive in scope and cast in the Commonwealth mould rather than the more limited ones implemented by IDRC to date. However, unlike in the case of COMSEC projects it is assumed that advisory services will not continue after project implementation is completed.

68. Based on the estimates made in the preceding section, these 10 projects will require 1100 person days of direct project inputs from Debt Specialists. Providing for an additional 50 percent of time for project support, preparations for training and other missions, report writing and follow-up from Ottawa, Debt Specialists will be required to provide 1650 days of inputs for these projects. This translates into 1 1/2 person years of Debt Specialists undertaking project work in the DRMS Group. As stated earlier, these inputs will be provided by one full-time Debt Specialist and the Project Manager who will be required to spend half his time on direct project work. The rest of the Project Manager's time will be spent on program management and promotion, liaison with international agencies active in the field of TA for debt management, fund raising for DRMS projects, and communications with DRMS projects overseas.

69. Similarly, in the case of Systems Staff, 130 person days will be required for direct project inputs. Allowing for an additional one-third of time spent on project work in Ottawa, the ten projects will require 1733 person days of systems inputs over the five year period. This works out to 1 1/2 person years of Systems Staff. If systems development work on CS-DRMS is done in IDRC, it will be necessary to allow for a higher percentage of time being spent on project work in Ottawa. The required inputs will be provided by one Systems Manager who will work on DRMS projects, maintain liaison with the COMSEC on systems issues and be responsible for managing the distribution of CS-DRMS to client countries. The possibility of using a staff member from IDRC's Management Information Systems group on a half-time basis for this should be investigated. The budget assumes that this will be possible. The remaining systems inputs will be provided by one full-time Systems

Analyst. The possibility of attracting a person who, with training, could straddle both loan administration and systems issues should be kept in mind.

70. The DRMS Group should be supported by an efficient Administrative Secretary as already stated. Though it may be necessary to hire a person at a higher level, it has been assumed in the budget that an Administrative Secretary will be hired.

71. This is the minimum level of staffing required to mount a credible debt management program and have the capacity to implement 10 projects during a five year period. Consultants will be used to the extent necessary to supplement staff resources. These costs will not be shown here as they will be recovered in full in the project budgets. It should be recognized that IDRC will be offering the CS-DRMS software and training in its use and advisory services in debt management. It is therefore necessary to demonstrate to clients that there is a balanced team to deliver the services. It is not sufficient to inform clients that staff will either be recruited if a sufficient number of projects are obtained or that the services will be delivered by consultants. In addition, IDRC's commitment to the program has to be demonstrated which will be a departure from recent performance. However, no financial commitment will be required from IDRC except to advance the expenses of the DRMS Group during the start up phase which has been assumed in the budget to be 12 months.¹⁵ This amount will be recouped from project revenue during the following five year period.

BUDGET ESTIMATES

72. Salaries paid to the staff of the DRMS Group are critical to hiring people with initiative and a knowledge of international debt issues who can operate with credibility to market the debt management program. This is very important for its success. The budget estimates are based on launching the program in a Secretariat of IDRC. It is recommended that the salary of the Project Manager be fixed in the range \$80-100,000 with a view to attracting a person of the required calibre. The mid-point of this range has been assumed for the budget. A salary of \$75,000 has been estimated for the Debt Specialist in the range \$70-80,000, \$70,000 for the Systems Manager in the range \$65-75,000, \$60,000 for the Systems Analyst in the range \$55-65,000 and \$38,000 for the Administrative Secretary. It is understood that these salaries may be too high for IDRC but it is the consultant's view that for expertise in financial management, the proposed salary levels are too low.

73. Office accommodation has been budgeted at \$28,000 based on IDRC guidelines. Communications and travel have been budgeted at \$12,000 and \$120,000 respectively and these are 50 percent higher than IDRC budgeting levels. \$20,000 has been provided for the purchase of hardware and proprietary software and \$10,000 for training of staff in new information technology. Provision of \$20,000 has been made for translation of screen formats and documentation into French though these expenditures will be discrete in nature and dependent on the release of new versions of

¹⁵. It would be more realistic to allow a start up period of 18-24 months.

CS-DRMS by the COMSEC. Office overheads have been budgeted at 10 percent of the total costs listed above and staff benefits at 18 percent of salary costs. The annual costs of the DRMS Group in the first year will be as follows:

| | |
|--------------------------------------|------------------|
| a) Project Manager | \$ 90,000 |
| b) Debt Specialist | \$ 75,000 |
| c) Systems Manager | \$ 35,000 |
| d) Systems Analyst | \$ 60,000 |
| e) Administrative Secretary | \$ 38,000 |
| f) Office Accommodation | \$ 28,000 |
| g) Communications | \$ 12,000 |
| h) Travel | \$120,000 |
| i) Hardware and software | \$ 20,000 |
| j) Staff training | \$ 10,000 |
| k) Translation Costs | \$ 20,000 |
| l) Office Overheads (10 % of a to k) | \$ 50,800 |
| m) Staff benefits (18% of a to e) | \$ 53,640 |
| TOTAL | \$612,440 |

74. Based on these estimates for the first year and annual salary (and benefits) increases of 2 percent during years 2-6, the total costs of the DRMS Group are estimated to be \$3,714,341 over six years. If it is proposed that these costs be recovered by the implementation of 10 projects during years over five years following the start-up period, the cost of these services to each average client will be of the order of \$372,000, the actual amount depending on country specific circumstances. In some countries, it will be higher while in others it will be lower. Since it is IDRC's hope that revenue will be generated, a margin of 25 percent is added making the cost of services that will be provided \$465,000. A margin at this level will provide IDRC with revenue of the order of \$930,000 over six years after the recovery of an expenditure of \$612,440 during the first year. There could be shortfalls from these expectations for a number of reasons. It may take longer than one year for the DRMS Group to obtain client commitments for DRMS projects. The organization of project missions to ensure that staff time is spent efficiently by arranging back-to-back missions may not always be possible. Further, 10 projects may not materialize during this period.

75. The client will have other expenditures in addition to these costs that are directly related to the delivery of services by IDRC. Hardware and proprietary software have to be purchased. The cost will depend on the number of sites and the users at each site, and the nature of the link from each site to the server. An estimate of US\$20,000 has been made for two sites linked by a dedicated telephone line, five users at the location of the database (and server) and three users at the other site, and UNIX, INFORMIX and communications software.

76. A license fee of L700 has to be paid annually by each user for the maintenance and supply of updates. This fee will be adjusted annually based on movements in the UK Consumer Price Index but will no longer be applicable if IDRC begins to function on a commercial basis for all DRMS projects.

Although no agreement has been reached with the COMSEC for this mode of operation, it has been assumed that the conditions applicable to the Crown Agents or those that were agreed in September 1992 between IDRC and the COMSEC for Special Category Countries will probably prevail. In terms of the minutes of these discussions, the countries will have to pay a license fee of US\$100,000 at the beginning of the project and an annual support fee of US\$20,000 for the first three years. This fee is to be negotiated between IDRC and the client for subsequent years. Thus the total cost of a DRMS project implemented by IDRC to an average client will be \$681,000 (US\$505,000¹⁶) which includes the support fee for the first three years.

77. In terms of the September 1992 discussions, IDRC is permitted to retain US\$15,000 of the licence fee and US\$41,000 of the annual support fees during the first three years.¹⁷ On the assumption that all ten projects would have been completed by the end of the sixth year with the third year of 2 projects spilling over into the seventh year, IDRC will be able to retain US\$526,000 (or \$710,100) of the licence and support fees. Additional revenue will accrue to IDRC from support fees payable after the third year which are to be negotiated with the client. These were terms discussed for Special Category Countries and not for commercial contracts and it is possible that the COMSEC may impose harder terms for the latter.

78. Compared to this estimate of project cost of the order of US\$500,000, the consultant is aware that the Crown Agents has estimated project costs at US\$150,000 in Cape Verde without including the annual support fees. It has also estimated the Nepal DRMS project to cost L300,000 (US\$465,000) but this includes the assignment of a Resident Adviser. In both cases, the COMSEC reduced the licence fee to US\$25,000. The DMFAS project in Argentina which led to the beta testing of version 5.0 and its subsequent installation cost the government US\$900,000 which it paid from its own resources. The consultant was informed that all costs incurred by UNCTAD staff and consultants for this project are being recovered except for the salary of the Chief of the Debt Management Section. This project is perhaps one of the largest debt management projects undertaken by any TA agency with the exception of that in Egypt and the most complex due to repeated reschedulings undertaken by Argentina. In the case of Ukraine, UNCTAD has estimated project costs for version 5.0 at US\$130,000 for data organization and collection, the installation of version 5.0 and training in its use, and reviewing data entry. The costs of hardware and proprietary software (estimated to be US\$100,000) are being met from the World Bank's Institutional Building Loan and of advisory services for institutional development for debt management and debt policy analysis by the World Bank/CIDA TA project.

79. These recent cost estimates of debt management projects do not provide much guidance to IDRC for determining the maximum price it could charge for the delivery of each project. However, a project budget of the order of US\$500,000 which includes a profit margin and payment of licence and annual support fees of the magnitudes envisaged appears to be excessive. Even if the country is given the benefit of the share of the licence fee and support fees that can be retained by IDRC, the project

¹⁶ 1US\$=\$1.35

¹⁷ Please see footnote 4.

costs can only be reduced to US\$449,000. Unfortunately, it is not possible to compare this estimate with a market price as there has been no commercial market for debt management projects since the early 1980s when main frame computers were used. IDRC or other agency will be venturing into uncharted waters in undertaking the commercial marketing of CS-DRMS.

FUTURE DEBT MANAGEMENT REQUIREMENTS

80. The COMSEC is gearing up to develop a new version of CS-DRMS to meet many concerns that were expressed at the User Group meeting held in the Summer of 1995. Some of them reflect new demands placed on country debt managers as their economies are being restructured and debt management becomes more complex. It is understood that the new features will include the following:

- There will be a conversion to a Windows environment which exists in many countries. It is also necessary to be able to operate in a network. These are considerable advances from the single user stand alone software operating in a DOS environment that was installed in many countries in the mid-1980s. The change to the UNIX operating system in the late 1980s permitted multiple users.
- It is recognized that many of the core reports in CS-DRMS are complex and an attempt will be made to simplify them. Further, there should be easier definition of reports by users. The ACE reporting writing facility in CS-DRMS requires a detailed knowledge of the database structure.
- The Management Tools module will better reflect the different types of restructuring that is done with loan portfolios.
- The reports produced using the Management Tools module are not user friendly and an attempt will be made to address this problem. With many countries graduating to using management reports, this issue has become a priority for future development.
- The new version will keep better track of the history of each loan. This feature will be useful in restructured loans.
- The database will become independent of the CS-DRMS software.
- Future development work will be undertaken in a language independent version enabling translation into any language.
- The production of integrated reports on domestic and external public debt.
- The development of an on-lending module.

Major modifications of the software will need to be followed up by corresponding changes in the French language version involving costs to IDRC in the next 1-2 years. These changes may also involve upgrading the hardware and proprietary software used for the operation of CS-DRMS with consequential costs to existing clients.

81. Unlike the situation that prevailed over ten years ago, the debt management requirements of countries are being set in a more developed computer environment with a number of software used for a variety of purposes. Ministries of Finance and Central Banks use software of varying

functionality for budget and foreign exchange management respectively. Since these systems encompass receipts and payments on loan operations, there is a demand for debt management software to interface with them. Thus systems staff of the DRMS Group should be able to assess these needs, which cannot be ignored any longer, and suggest solutions.

82. Many countries are liberalizing their foreign exchange regimes. This makes it impossible for data on private sector loans to be captured from data available with Exchange Control Departments. Instead, systems must be set up to obtain the information from returns to Central Banks by commercial banks on daily foreign exchange receipts and payments. This is not achieved easily and a decision on whether this course of action should be pursued depends on the importance of private debt in the country's total debt.

83. Unlike in the past decade, more countries wish to manage their loan portfolios including their restructuring actively. As a consequence, it is expected that there will be a considerable demand for advisory services in debt management. It is a continuing service that is required which merchant banks are set up to provide. ELAS was able to compete in this market up to a point but the lack of a presence in capital markets limited this activity, particularly in regard to new borrowings. This is a point that IDRC should consider if it continues with the debt management program and widens its scope to correspond with the services provided by the COMSEC. In this event, a person who is active in the capital markets would make an excellent Project Manager but the salary that will be offered makes this impossible to realize.

84. If the debt management program is launched and achieves the targets set, the momentum could carry it forward until the demand for computerizing loan data world over is satisfied by countries using the CS-DRMS or DMFAS software or developing their own. At that time, the program could become mainly an advisory one with the software aspects focussing only on the provision of updates. The closure of the program after ten projects is also a possibility that should be considered. It is expected that the difficult software issues currently facing IDRC in the event of closure would have been clarified with the COMSEC, leading to better arrangements to look after the software support and maintenance needs of client countries.

SUMMARY OF RECOMMENDATIONS

85. There are only two options that should be considered by the Management of IDRC, ie. Closure or Active Marketing of the DRMS Program. Both courses of action have costs and risks.

86. **If the decision is made to close the program, IDRC will be able to get out of a program to which high priority has not been assigned in the 1990s.**

a) IDRC should,

- transfer responsibility for software support and maintenance for Bulgaria, Lao PDR and Thailand to the COMSEC, and
- negotiate with UNCTAD, Benin, Cameroon and Mali to assist in the conversion from CS-DRMS to DMFAS. The costs of these conversion may be in the region of \$600,000. There could be additional costs of developing an interface between CS-DRMS and DMFAS for data transfer,
- or
- encourage Benin, Cameroon¹⁸ and Mali and possibly the BCEAO to enter into a cooperative arrangement to provide mutual software support and maintenance and take responsibility for the French version of CS-DRMS. Some financial support may necessary in the initial stages.

b) IDRC should not,

- pursue the establishment of a resource centre in the public or private sector or a cooperative entity between Benin, Cameroon and Mali which would lead to an open ended financial commitment.

c) The risks in making this decision are that,

- this will arouse the displeasure of the COMSEC at the abandonment of CS-DRMS without a serious attempt being made to use the software for projects, and
- Francophone countries in Africa will feel let down by IDRC for abandoning the French version of CS-DRMS.

87. **If the decision is made to market the program actively**, IDRC can become a major provider of consultancy services in debt management and obtain a return on the investments made since the early 1980s.

a) IDRC should,

- make a firm and definite commitment to market the program,
- have a business plan drawn up for the project,
- allocate funds necessary for the first year of operations,
- establish a Secretariat and staff the DRMS Group as proposed in this paper,
- establish contacts with the World Bank, IMF, UNDP and the regional development banks to announce the re-launching of the program,
- monitor the program on a quarterly basis with a view to winding it up after one year if there are no prospects of any contracts being signed,
- re-launch the program without delay because project opportunities are being lost, and
- renegotiate the Distributor Agreement with the COMSEC to serve the needs of the program, particularly the fees and access to source code.

¹⁸. If the installation of the English version of CS-DRMS in Cameroons is judged not to be feasible.

- b) IDRC should not,
- attempt to micro manage the program. Instead, competent staff should be recruited and allowed to develop the program without hindrance.
- c) The risk in making this decision is that,
- IDRC will lose the funds committed for the first year of operations, ie. \$612,440, or
 - the market and revenue projections may not materialize for the reason that there has been no commercial market to determine the maximum price that the market can bear.

88. The consultant's choice of options is based on his experience in launching the Commonwealth program in 1983 and work associated with it until 1989 and subsequent experience as a consultant with the World Bank, IDRC and Crown Agents in Belarus, Bulgaria, Lao PDR, Moldova, Oman, Thailand and Ukraine. More recently, he has been preparing proposals for private sector firms to undertake assessments of debt management requirements in Azerbaijan and Cambodia. If IDRC is to market the program actively, it has to convince countries requiring assistance and agencies financing debt management projects that it is committed to providing access to **all** countries like the UNCTAD program. It will need to work out a collaborative arrangement with the Crown Agents to avoid creating the impression that debt management projects including the CS-DRMS software are difficult to obtain. The program has to be delivered in an efficient and effective manner to enable it to compete with UNCTAD which has yet to make a decision on recovering full costs in its projects. Further, the program has to be assured of a strong institutional commitment, the appointment of appropriate staff, and the freedom and flexibility to pursue project prospects aggressively. Against these demanding requirements, there is IDRC's performance in the debt management program in the past five years. There has to be a complete about turn on the part of IDRC in regard to this program which is difficult for the consultant to visualise. This leads to the conclusion that IDRC should withdraw from supporting or implementing new DRMS projects. It should, however, assist the three countries where projects are being implemented in Francophone Africa to continue using CS-DRMS through an appropriate program intervention from among the options proposed. At the same time, it should transfer responsibility for software maintenance in the three countries where the English version of CS-DRMS has been installed to the COMSEC. If such a program intervention is not possible, IDRC should be ready to face the adverse consequences that will follow from its withdrawal from the program.

Annex 1**Summary of Discussions with Agencies Consulted****CIDA**

There is institutional interest in debt management overall though at a country level this can only be determined by discussions with each country desk. As expected, no interest was expressed by the Francophone Division. A similar response was received from the China program. There is definite interest in funding a project in Kazakhstan provided positive results are obtained from the Ukraine, Belarus and Moldova regional project which is being executed by the World Bank.

IDRC

Discussions in IDRC indicated that no funds can be obtained for the DRMS program unless it can be demonstrated that these could be recovered and revenue generated over a medium-term period. Unfortunately, TA funds are scarce and the organization is looking for revenue generation at a very difficult time. IDRC is handicapped by the need to demonstrate that it has a product and services that responds to client needs effectively and expeditiously. Further, there has been no commercial market for advisory services on debt management, including the provision of software, since the mid-1980s.

EDC

The software used by EDC for monitoring its lending program requires replacement. It is testing CS-DRMS to determine whether it can serve its purpose until a more comprehensive system can be developed. If the assessment shows that CS-DRMS meets EDC's needs, it will negotiate a long term arrangement with IDRC. Several problems were mentioned. The first is that the software does not operate in a Windows environment. Second, the EDC does not wish to re-enter its loan data. In view of this an interface with CS-DRMS should be implemented for which the COMSEC has to be involved. This will cost money but the priority for this work will be determined by the COMSEC. Third, SYBASE appears to be the database management system most commonly used at EDC and not INFORMIX on which CS-DRMS is based. Fourth, which is really a compliment to CS-DRMS, the staff of EDC have found the software to be too accurate and sensitive to daily charges.

EDC is examining CS-DRMS for its own use. The possibility of marketing it to EDC borrowers in the future exists but this has not been discussed in the institution.

North-South Institute

Preliminary discussions were held with the Institute to determine whether it may be interested in providing a home to the DRMS program. Due to funding difficulties, it is likely that the Institute may undertake consultancy assignments in the future. There was interest in exploring the idea further but the risky nature of the program was a major consideration in the discussion.

UNDP

Following the publication of the UNDP report entitled 'Debt Management and the Developing Countries' in July 1989, a Joint Program for technical cooperation with developing countries was launched by the UNDP, UNCTAD and World Bank. It covered the period 1992-96 and funding of US\$5.5 million was earmarked from the Global Interdependence Program of UNDP. These funds enabled UNCTAD to begin development of a new version of DMFAS based on a database management system (ORACLE) for the first time, with the World Bank providing technical inputs for the software development. Funds were also made available to the World Bank to undertake assessments of debt management requirements of selected countries and conduct regional training programs.

One feature of this program was that the COMSEC and IDRC were excluded from obtaining any funding. This was not intended in the UNDP report of July 1989 but that was what transpired. One project proposal submitted by the COMSEC was not approved.

About US\$3.0 million of the funds committed by UNDP were withheld after the end of 1994 because of financial difficulties and the Joint Program was terminated. UNDP's central funding role ended in 1995 with the allocation of US\$200,000 to UNCTAD following a meeting of donors which was organized to mobilize resources to complete the software development by UNCTAD. Individual countries could yet obtain funds from their Country Programs to finance debt management projects as in some FSU countries. The collaboration between UNCTAD and the World Bank in software development was derailed with the Bank not knowing the current status of the release of the new version.

UNCTAD

The funding problems caused by UNDP's withdrawal were overcome by commitments made at a donor meeting, chaired by Lars Kalderen, in September 1994. UNCTAD was able to raise US\$2.0 million of which US\$200,000 was contributed by UNDP. The main donors were Norway, Sweden and Switzerland followed by Netherlands and Italy. This funding has provided stability to UNCTAD's staff as they gear up to instal the new version of DMFAS. The next donors meeting is scheduled for June 1996.

At the time of the consultant's visit to UNCTAD in December 1995, 27 countries were listed as having installations of DMFAS with 9 others shown as pipeline projects. One of the pipeline projects is in the Central African Republic which had also made a request to IDRC. A similar situation prevails in the case of Chad, BCEAO and Senegal though no action has been taken by UNCTAD on these requests.

The main activity scheduled for 1996 is the conversion of DMFAS sites with 4.1 Plus installations to 5.0. It is understood that these were postponed for 1996 until the modifications following the beta testing of version 5.0 in Argentina were completed. The full list of project countries is at Annex 5.

It was understood by the consultant that the debt restructuring module had not been developed. This will be done at a later stage as would the interface with the World Bank's DRS.

UNCTAD has not had a policy of cost recovery in its projects. Present practice appears to aim at recovering the full cost of consultants used for DRMS projects, travel and per diem of UNCTAD staff traveling to project countries and about 4 person months of the time of systems analysts and programmers for each project. An element of cost recovery exists only in the last item. The only project where full cost recovery was attempted was in Argentina except for the time of the Chief of the Debt Management Section. It is understood that this issue was raised at the last donors meeting and will no doubt be raised again. A distinction is drawn by UNCTAD between development and project costs. It is possible that UNCTAD may move in the direction of recovering full project costs.

UNITAR

Over the years, UNITAR has carved out a niche for itself by focussing its training programs on the legal aspects of debt and financial management. More recently, it has organized courses on the legal and economic aspects of trade, trade financing and investment for the FSU countries. It has no in-house expertise in the subject areas but has a strong capability to organize training programs at a regional and country level using resource persons for the training. It receives core funding for training in debt management from Ireland and Switzerland.

Sida

Swedish development cooperation was reorganized in July 1995 by the amalgamation of the former SIDA, SAREC, SwedeCorp, BITS and the education unit Sandoe-School to form the new Swedish International Development Cooperation Agency known as Sida. Past Swedish assistance for debt management focussed on East Africa, mainly Kenya. The TA was provided by the staff of the Swedish National Debt Office (SNDO). In the early 1990s, following a change in senior management, the SNDO withdrew from this commitment. The then SIDA 'shopped around' for another agency to take over implementation and even approached the Irish Debt Office with no success. It was perhaps an opportunity lost by the COMSEC and IDRC. SIDA attempted to recruit consultants directly but found that this did not provide effective delivery of services. The project was terminated and evaluated recently.

Sweden is supporting a debt management project in Latvia and Lithuania (a project in Estonia is financed by Finland). It is organized to provide inputs similar to those in the CIDA/World Bank project in Ukraine, Belarus and Moldova. However, consultancy inputs are being provided by more frequent inputs from Swedish consultants (dictated by proximity) than that which is possible by Canadian consultants.

Sida will be open to considering new project proposals in debt management though there is no 'home' for the program in the institution. However, more than 50 percent of Swedish assistance to Eastern Europe and Central Asia is earmarked for technical cooperation and capacity building. This should

provide opportunities for TA projects in this region but nothing more definite can be said at this stage as the institution has not settled down after the reorganization last year.

European Bank for Reconstruction and Development

Given the private sector orientation of the Bank and the fact that the debt problems of the countries in Eastern Europe and Central Asia are the functional responsibility of the World Bank, it is unlikely that there will be any program interest in debt management.

Crown Agents

It is nearly three years since the Distributor Agreement was signed with the COMSEC. There are two DRMS projects in the pipeline in Cape Verde and Nepal. These projects will be implemented through consultants as the Crown Agents has not hired staff for the program. No active marketing of CS-DRMS is done and the Crown Agents merely responds to requests for demonstrations if funding is provided. A number of 2-3 week training programs in debt management have been organized by the Crown Agents and this appears to provide it with a growing source of income.

COMSEC

Following the User Group meeting held in the Summer of 1995, ELAS is considering proposals made by consultants for the future development of CS-DRMS. The report of these consultants was not made available and should be requested if IDRC proposes to continue with the DRMS program. ELAS proposes to begin development work in 1996 with a view to completion in 12-18 months. Some of the features that will be dealt with in the new version have been commented on in the main report. Discussions confirmed that the COMSEC is addressing the major issues regarding the software. There will be implications for IDRC in regard to the French version and for hardware and proprietary software needed for any version.

There was no change in the position regarding pricing except to re-state the COMSEC's willingness to discuss the issue on a case-by-case basis. If IDRC decides to market the program actively, the pricing issue needs to be discussed and embodied in a new agreement at which time, the use of two distributors with different pricing structures should also be discussed as it will have an impact on the marketing of DRMS projects..

The continuing maintenance and technical support required for CS-DRMS in the context of shrinking budgets and the absence of a source of revenue should be a concern to the COMSEC.

World Bank

Following the collapse of the Joint Program and staff cut backs , the International Finance Division does not appear to be active in providing or mobilizing resources for TA in debt management. Its continuing role appears to be the production of the World Debt Tables, quality control of reporting to the DRS, the preparation of inputs on debt management and debt sustainability for Country

Assistance Strategies and formulating TA projects when funding is available from other donor sources or World Bank loans or credits.

The Division is unhappy about its relations with UNCTAD particularly in relation to the development of version 5.0 of DMFAS. At the same time, it does not appear to be attempting to sort out the issues. It continues to maintain the position that countries should look at both software but recognizes the lack of the ready availability of CS-DRMS.

The COMSEC had been under the impression that new DRS forms had been prepared but it was confirmed that this was not the case. It had also been reported that the IMF had prepared forms for Economic Surveillance but this is not so either.

The consultant was informed that the ESAIDARM is being given an expanded mandate. It was understood that an evaluation had been done recently but no copy was available. As a result of inputs from the IMF, training programs in macroeconomic management are to be included in the mandate of ESAIDARM which is to be renamed the Macroeconomic and Financial Management Institute. (COMSEC staff informed the consultant that their DRMS project workload has not been reduced as a result of ESAIDARM training programs). Inquiries were made about the similar initiative for Francophone Africa. No progress has been made after consultants reported in 1994. The staff member who was responsible for it in the Division and did much of the groundwork for ESAIDARM has moved to another assignment.

Asian Development Bank

The AsDB/COMSEC regional debt management project for the South Pacific is well regarded in the region. The AsDB has not decided on its future course of action when the current phase ends in December 1996. The COMSEC has asked for an evaluation of the program but the Bank has not made a decision on this request.

The Bank has TA funds which can be used for institution building. If projects materialize in China or Mongolia, it could be a source of funds.

Other Consultants

Lars Kalderen continues to be active as a consultant in debt management for both the UNDP and the World Bank. He feels strongly that TA programs should continue and was planning to write to the President of the World Bank suggesting that the Bank call a meeting of all agencies active in the field to discuss future TA needs. He expressed great unhappiness about IDRC terminating its program.

Annex 2**Persons Consulted****Canadian International Development Agency**

Ms Carolyn McAskie, Vice President, Africa Branch

Mr Soe Lin, Director, Development Economics Policy, Policy Branch

Mr Jeanne-Pierre Balduc, Director-General, Strategic Planning, Africa and Middle East Branch

Mr Peter Mousley, Director, International Financial Institutions Division, Multilateral Programmes Branch

Mr Ian Wright, Director of Operations, China Division, Asia Branch

Export Development Corporation of Canada

Mr Hamish Sturton, Loan Administration Department

Ms Doreen Ide

International Development Research Centre

Mr Keith Bezanson, President

Mr Raymond Audet, Vice President, Finance and Administration

Mr Robert Valantin, Chief Scientist, Information

Mr Robert Auger, Secretary and Legal Counsel

Mr Terry Gavin, Director, MINISIS Systems

Mr John Hardie, Director, Policy

Mr Zbigniew Mikolajuk, Senior Program Specialist

Mr Jean Guilmette, Director, FSU, Eastern and Central Europe

Ms Martha Stone, Senior Adviser, Information

Mr Antoine Raffoul, Economist, DRMS Program

North-South Institute

Dr Roy Culpeper, President

United Nations Development Programme

Mr Thord Palmlund, Special Adviser, Management Division and Governance Division

Mr Thomas Cox, Deputy Chief, East Asia Division

United Nations Institute for Training and Research

Mr Barbar Kamal, Programme Officer

United Nations Conference on Trade and Development

Mr Philippe Straatman, Financial Economist

Mr Mark Willis, Financial Economist

Mr Alain Bodin, Senior Financial Economist

Mr John Burley, Director, Economic and Technical Cooperation

Swedish International Development Agency

Ms Cecilia Hermansson, Senior Economist, Policy Department
Ms Liisa Tantari, Area Manager, Department for Central and Eastern Europe

European Bank for Reconstruction and Development

Mr Paul Krukowski, Deputy Head, Credit Portfolio Management

Crown Agents Financial Advisory Services Ltd

Mr Colin Seelig, Manager

Commonwealth Secretariat

Dr James Funna, Director, Economic and Legal Advisory Services Division
Dr Raj Kumar, Special Adviser
Mr Jameel Chaudhary, Chief Project Officer (Systems Development)

The World Bank

Ms Malvina Pollock, Principal Debt Specialist, International Finance Division
Mr Sergei Shatalov, Debt Specialist, International Finance Division

Asian Development Bank

Mr John Samy, Senior Economist, Office of Pacific Operations

Other Consultants

Mr Lars Kalderen, Chairman, DEVFIN Advisers (former Director-General, Swedish National Debt Office (SNDO))
Mr Peter Engstrom, Adviser Baltics Debt Management Project (former staff member of the SNDO)
Mr Gregor Aminoff, Economist/Systems Analyst, International Market Department, SNDO
Ms Anne McGlone, Quantime Ltd, London (former Systems Manager of ELAS)
Mr Nicholas Cop, (former Systems Analyst, DRMS Group, IDRC)

Annex 3**Terms of Reference**

Under this contract, the consultant will be required to conduct a marketing study on the commercial potential and possible privatisation of the debt management and recording system software (CS-DRMS).

A. The study will explore:

- (i) the overall characteristics of the market for the software, including the identification of potential users, performance expectations, and the long-term potential of the market;
- (ii) the present status of the software, including its distribution potential and related costs;
- (iii) the Commonwealth Secretariat's policy regarding further support, maintenance, development and enhancements related to software;
- (iv) the DRMS products and services that could be marketed and how they should be packaged and presented to potential users;
- (v) any upgrades or changes that are necessary to sell these products and services, along with their projected costs;
- (vi) whether similar products or services exist in the market;
- (vii) the potential costs associated with various options related to the commercialization of the software (eg. in-house business unit, spin-off, joint venture with the private sector etc) and the steps that will be involved in implementing these options;
- (viii) potential profits to be generated; and
- (ix) the potential, if commercialization is not a viable option, to generate funds from sources other than CIDA.

B. The study will include a brief survey of countries that have or are implementing projects using the CS-DRMS or DMFAS software. The programs of other donors providing technical assistance in this field will also be surveyed. The following possibilities will be studied:

- (i) World Bank projects such as Belarus, Moldova and Ukraine, other FSU countries and Cambodia.
- (ii) Unsatisfied demand in the Commonwealth. Will South Africa be a recipient?
- (iii) The requests received by IDRC from seven countries in West Africa and BCEAO on which action is pending.
- (iv) Countries that are not reporting or reporting in an unsatisfactory manner to the Debtor Reporting System of the World Bank.
- (v) Major borrowing parastatals that are using the CS-DRMS software.
- (vi) DMFAS countries that are considering a change in the software.
- (vii) Agencies in Canada such as CIDA and the EDC.

C. The availability of Technical Assistance funds from the World Bank, Regional Development Banks (mainly the Asian Development Bank and Islamic Development Bank), UNDP and

UNCTAD, Commonwealth Secretariat and bilateral donors such as CIDA, ODA and Sida will be studied.

- D. The possibilities of IDRC participation in several debt management training programs such as the East and Southern Africa Initiative in Debt and Reserve Management (ESAIDARM) and a similar initiative to be launched for West Africa, and those of the World Bank (EDI) for the FSU countries, Crown Agents and UNITAR will be examined.
- E. The study will also assess the impact of winding up IDRC's DRMS program, and will examine specifically:
- the implications for software support in Bulgaria, Lao PDR, Thailand, Benin, Cameroon and Mali.
 - the action that should be taken on the pending requests from seven West African countries and BCEAO.
- F. If a commercial venture is warranted, the study will examine whether:
- IDRC should go it alone.
 - Seek a collaboration arrangement with a partner such as the Crown Agents.
 - Establish a NGO or private company to market CS-DRMS.

Annex 4**Alternative Project Cycle and Budget Estimates**

The DRMS Group in IDRC has proposed a shorter project cycle which would require inputs of 105 days from a Debt Specialist and 60 days from a Systems Analyst. This compares with 110 and 130 days from a Debt Specialist and Systems Analyst respectively estimated by the consultant. Using these and the same basis of estimation, the staff numbers required for the DRMS Group to implement 10 projects will be the Project Manager, one Debt Specialist, Systems Manager and Administrative Secretary, with spare capacity available for additional systems inputs through the Systems Manager. The revised annual budget for the DRMS Group based on these staff numbers will be as follows:

| | |
|--------------------------|------------------|
| Project Manager | \$90,000 |
| Debt Specialist | \$75,000 |
| Systems Manager | \$70,000 |
| Administrative Secretary | \$38,000 |
| Office Accommodation | \$25,000 |
| Communications | \$12,000 |
| Travel | \$90,000 |
| Hardware and Software | \$20,000 |
| Staff Training | \$10,000 |
| Translation Costs | \$20,000 |
| Office Overheads | \$45,000 |
| Staff Benefits | \$49,140 |
| TOTAL | \$544,140 |

These budget estimates lead to consultancy services costing \$329,325. Adding a margin of 25 percent and the license and support fees, the total cost to the client will be \$627,656 (US\$464,930). This compares with \$681,000 (or US\$505,000) estimated in the section on Budget Estimates, the difference being under 10 percent. This does not change the underlying argument in the paper that costs of this magnitude appear to be high.



Annex 5

CS-DRMS and DMFAS Projects

CS-DRMS Projects

| Caribbean | Africa | Asia and Pacific | Other |
|--------------------------|--------------------|-------------------------|--------------|
| Antigua & Barbuda | Benin + | India | Bulgaria + |
| Bahamas | Botswana | Maldives | Cyprus |
| Barbados | Cameroon + | Lao PDR + | |
| Belize | Ghana | Pakistan | |
| Dominica | Kenya | Papua New Guinea | |
| Grenada | Lesotho | Sri Lanka | |
| Guyana | Mali + | Thailand + | |
| Jamaica | Malawi | Fiji | |
| St Kitts & Nevis | Mozambique | Nauru | |
| St Lucia | Namibia | Solomon Islands | |
| St Vincent & Grenadines | Nigeria | Tonga | |
| Anguilla # | Sierra Leone | Tuvalu * | |
| British Virgin Islands # | South Africa * | Vanuatu * | |
| Cayman Islands # | Swaziland | Western Samoa | |
| Montserrat # | Tanzania | Nepal * | |
| | The Gambia | Cook Islands * | |
| # Dependent Territory | * Pipeline Project | + Implemented by IDRC | |

DMFAS Projects

| Africa | Asia | Latin America & the Caribbean | Eastern Europe & Central Asia |
|---------------------------|-------------|--|--|
| Burundi | Bangladesh | Argentina | Belarus* |
| Central African Republic* | Indonesia | Bolivia | Romania |
| Djibouti | Lebanon | Costa Rica | Ukraine* |
| Egypt | Pakistan | Dominican Republic* | Moldova* |
| Ethiopia | Philippines | Ecuador* | |
| Guinea Bissao | Vietnam* | El Salvador | |
| Mauritania | | Guatemala | |
| Rwanda | | Haiti | |
| Togo | | Honduras | |
| Uganda | | Nicaragua | |
| Zambia | | Paraguay* | |
| Zimbabwe | | Trinidad and Tobago | |
| | | Panama | |
| | | Peru* | |

* Pipeline Project