

# NEWSLETTER

Number 9

Spring 1996

**W**elcome to the ninth issue of the DMFAS newsletter. At the time this Newsletter went to press, DMFAS 5.0 had been successfully installed in Argentina, Romania, Bangladesh, Zambia and Paraguay. Many more countries will receive the new version in 1996. However, while this new chapter in the continuous improvement of the system is being opened, the previous one is not yet closed: UNCTAD recently issued update No 3 of DMFAS 4.1Plus, thus ensuring continued support to all our users. Moreover, it is now possible to reach the DMFAS Programme on Internet, which allows us to accelerate our Hotline services by exchanging electronic mail messages and sending files electronically, a procedure that takes a few hours instead of several days for mailing the diskettes. You will find more information on this subject and an introduction to the possibilities offered by the Internet in the Technical

Focus. In addition, as many users still have questions about the new version, we will give you the answers to the most commonly asked ones. Furthermore, this issue will inform you about: The possibilities of integrating the DMFAS with other financial systems, multilateral debt, debt management in Egypt and the role of debt management systems in the CIS countries. Enjoy the reading!

## Main events in 1995

▶ 1995 was an important year for the DMFAS team. Not only can the release of DMFAS 5.0 can be considered a milestone in the development of UNCTAD's debt management programme, but other events of 1995 will have a significant impact on the future of the programme:

The DMFAS received many requests from new countries for the system. 1996 will see the DMFAS expanding to a new region - East Europe and the CIS countries. Several implementations are foreseen in the near future, and a Russian version of DMFAS will be prepared in co-operation with the World Bank.

The shortage of UNDP funds, from which the DMFAS Programme received its main contributions in the past, caused it to change its funding strategy. After a meeting of interested potential donors in late 1994, a number of countries pledged their support to the DMFAS Programme, underlining the importance of this type of technical assistance to indebted countries. The programme is now supported by the following donor countries: Denmark, Finland, Italy, Norway, The Netherlands, Sweden and Switzerland. The donors provided funding for 1995 and 1996. A second donor's meeting will take place on 4 June this year, during which the DMFAS team will present the progress made to date as well as its future plans.

### DMFAS Highlights:

- DMFAS Main Events
- DMFAS 4.1Plus Update No.3
- DMFAS 5.0 and integrated financial management
- Implementation of DMFAS 5.0: Some issues to consider
- Multilateral debt: A call for further action
- Questions to the DMFAS
- Mission Roundup
- Recent UNCTAD Publications
- Technical Focus: Customizing SPEPC Processor News: Internet
- UNCTAD News

On the technical side of the activities of the DMFAS team, a link to the Argentinean financial administration system SIDIF was created, which automatically emits the payment order. DMFAS will continue to expand in this direction.

Moreover, a study on domestic debt was carried out, which will be used to create a specific module to register this type of debt more easily in the system.

## Update No.3 of DMFAS 4.1Plus

Although the DMFAS team's main effort in the last two years has focused on the launching of DMFAS 5.0, we have also continued to improve the current DMFAS 4.1Plus version. As part of our continued commitment to our existing country-clients, most of which have not yet switched to DMFAS 5.0, we have recently released the third update of the DMFAS 4.1Plus system. Although this will be the last official update of DMFAS 4.1Plus, we will continue to provide support for this version for the foreseeable future, (and, of course, we will correct any bugs that might still be detected by our users).

The latest update, which was shipped out to our users in November 1995, contains fewer modifications than the previous two updates. However, they are important ones and were requested by several user-countries. The modifications covered by update N°3 include:



### Correction in the projections report based on outstanding at a given date

If a loan has several schedules and one schedule has an outstanding equal to zero at a given date, the whole loan was rejected in previous versions. Now, only the schedule with an outstanding equal to zero is rejected. A calculation error of the total for the projection based on outstanding at a given date has also been corrected.

### Correction in the currency used in projection reports

Projection reports based on loan currency are now always shown in loan currency instead of repayment currency.

### Improved subset backups when dealing with loans with composite headers

When the subset backup procedure was used from within the DMFAS backup menu in order to split a database in several parts, each to be installed on two or more PCs, the composite headers were lost. This occurred because the routine for selecting subsets of loans was the same both for the DMFAS reports and for the subset backup. As the composite headers were not included in the reports, they were also not included when creating a subset backup. This has now been corrected by adding the program "Subset.exe". Of course, this change will only affect installations where a database is split between several PCs using DMFAS' subset backup.

Other minor changes and corrections were also included in the update and these are described fully in the documentation accompanying the update. For those debt office managers who still have not received this latest update, please contact the DMFAS Programme immediately.

## DMFAS 5.0 and Integrated Financial Management

In several countries, and in particular, in Argentina, the DMFAS Programme is facing a new challenge: integrating its debt management software system within the wider framework of public financial management. The trend towards integrated financial management systems is expected to intensify, especially in Latin America. This will impose new demands on our country activities.

The importance of public financial management (PFM) in developing countries has become increasingly evident in the context of their fiscal constraints. An important element of the PFM reform process has been the development and implementation of computerised information systems. Normally, a wide variety of computer based systems support PFM. However, these systems are usually implemented as components of separate projects responding to specific needs. They have overlapping and sometimes conflicting functionalities and incomplete coverage, particularly for managerial information requirements that normally span several functional areas.

Public debt management, both domestic and external, is an important element of public financial management. Clearly, transactions (disbursements, repayments, arrears, etc.) related to loans and other financial instruments, which are recorded in the

DMFAS debt unit, also need to be recorded and monitored for treasury, accounting and budgetary purposes. Therefore, the linking of different financial systems which require the same data, can lead to substantial efficiency gains in public financial management.

Argentina is the first country in which such an integrated system involving the DMFAS was created. The DMFAS in Argentina contains an interface with the SIDIF (Sistema Integrado de Administracion Financiera), which enables the exchange of data between the DMFAS and the SIDIF. The link is possible because every loan in the DMFAS incorporates the code for corresponding budget allocations. The interface enables the user to carry out the following operations:

Every time a disbursement or other inflows of funds originating from public credit will be registered in the DMFAS, it will also automatically be registered in the SIDIF.

The DMFAS determines the size of debt service payments and automatically generates and emits the payment order, which again is reflected in the SIDIF. Simultaneously, the payment note is issued, to be signed by the Treasurer General.

DMFAS is firmly integrated in the Argentine financial administration system. Several countries have now expressed their interest in developing such an interface with their systems along with the DMFAS 5.0 implementation.



## IMPLEMENTATION OF DMFAS 5.0

### SOME ISSUES TO CONSIDER

DMFAS 5.0 represents a significant technical improvement on previous versions of the system. The new version, however, requires considerably more computer capacity, training and maintenance than previous versions of the DMFAS. In addition, the conversion of data from 4.1Plus format to 5.0 may be a major undertaking depending on the size and the complexity of a country's database. The implementation of version

5.0 must therefore be properly planned, and the preparations need to commence well in advance of the actual implementation mission. A number of conversions have already been made, including Argentina, Bangladesh, Romania and Zambia. Based on the experience gained so far, here are some of the issues which will have to be considered for those countries converting to version 5.0 during 1996:

Some **manual intervention in the 4.1Plus database** may be necessary before the conversion can be done. This concerns, among others, IBRD reference numbers, creditor reference numbers, loan names and real versus theoretical transactions. DMFAS 5.0 exercises a large number of data consistency controls which did not exist in previous versions of the system. Although each individual control may be deactivated during the conversion process (thereby permitting a conversion where required checks are not performed), this is not a permanent solution because they cannot be activated again until all data is 100 % consistent. Initially, our idea was that many of these technical corrections could be undertaken in Geneva. Experience shows, however, that this is not necessarily the case, since some of the required modifications necessitate cross-referencing with the manual files maintained in the respective debt units. In particular, it will be

necessary to verify payment information in order to match the ledger payments to the theoretical amortisation schedules. This is particularly critical for countries with huge stocks of arrears. Also, for certain codes like the IBRD [DRS] reference number, close control and co-ordination needs to be exercised and these references should be agreed with the local World Bank office.

A **pre-conversion kit**, consisting of programs which check the database for duplicate loan names, IBRD and creditor reference numbers as well as consistency between scheduled and real transaction can be obtained from UNCTAD upon request.

The **data should be sent to Geneva** well in advance of the implementation mission, and a test-conversion will be made. Three to six months before the planned implementation mission, UNCTAD will take contact with you to ask for a

backup of the database for analysis by the DMFAS country responsible. The inconsistencies detected will be reported to the country who will then be asked to correct as many as possible of them. If time permits, the country may send a second, corrected backup to Geneva before the implementation mission, in which case UNCTAD may be able to convert the data in Geneva before the mission. This would then allow more time for training and testing of DMFAS during the mission.

▶ For countries with large databases, a separate **data validation** mission may be required before the final implementation mission by UNCTAD. This will be evaluated in each case based on the received database.

▶ The **new operating environment** for DMFAS 5.0 is very different from the previous versions. Not only does the DMFAS system itself have a completely new presentation, but in addition, it rests on a completely new platform composed of Oracle and Windows. Users with little or no previous experience with Windows need time to get used to this and the basic training suggested by UNCTAD on these supporting software are of capital importance to the success of the implementation.

▶ Make sure the required **equipment** is in place well in advance of the planned implementation mission. Deliveries of equipment often cause delays because all, or parts of it sometimes arrives late, is wrongly delivered, does not work as it should or has been wrongly ordered due to misunderstanding of the specifications. It is essential to make sure that equipment has been ordered in strict concordance with the latest document "Hardware, Software and Training Requirements" provided by UNCTAD.

▶ Since the new environment is so different from previous versions, and for the purpose of properly testing the converted data, a **parallel run** between 4.1Plus and 5.0 should be made. The length of this test-run should be a function of the complexity of the concerned database. In general, UNCTAD recommends to stop data entry into the 4.1Plus database on the date when the last set of backup diskettes is sent to Geneva for verification (and possible conversion). However, this is not necessarily required. The country may continue entering data in 4.1Plus and thereafter enter the same data into DMFAS 5.0 when it is installed. The advantage with this method is that work in the debt unit is not interrupted. The disadvantage, on the other hand, is that the country will not immediately be able to compare results from 5.0 with 4.1Plus since you must catch up in DMFAS 5.0

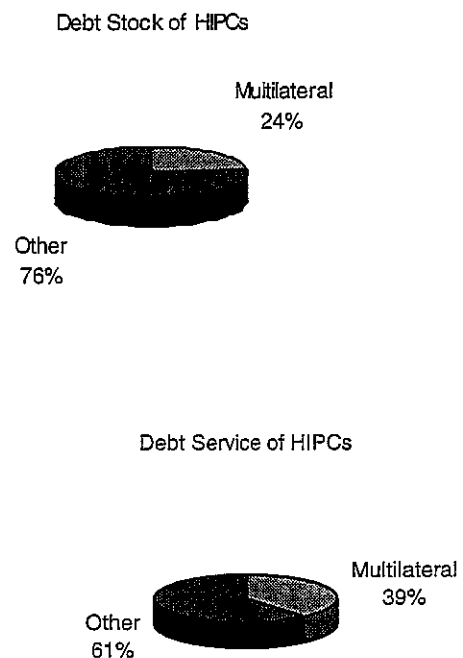
first. For the parallel run, the country should prepare a list of 4.1Plus reports which are being utilised in the country and which the debt managers will expect to see also in the future. The country may then limit the consistency tests between version 4.1Plus and 5.0 to these reports only. For all other reports, it is recommended to make a fresh start using version 5.0.

## Multilateral Debt: A call for further action

▶ Even after the Paris Club responded to the need for further debt relief of highly indebted countries by adopting the Naples terms, multilateral debt still represents an important burden for many of the debtor countries. Multilateral debt of highly indebted poor countries (HIPCs) almost tripled between 1982 and 1993, to US\$ 55.5 billion, representing 24% of the total debt outstanding of this group.

The share of multilateral debt varies widely between different countries. For some of the coun-

### Heavily indebted poor countries' debt 1994



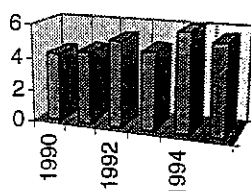
Source: World Bank

tries, multilateral debt accounts for more than half of the debt burden. The share of multilateral *debt service* exceeded 46 per cent of total debt service for some of the HIPC. Due to the preferred creditor status of multilateral institutions, multilateral debt

has often been serviced by accumulation of arrears on other types of debt. Failure to meet multilateral debt service obligations can have severe repercussions, including suspension of debt rescheduling agreements and cessation of new financial flows. Therefore, as an important portion of new loans have often been used to meet debt service obligations from past loans rather than financing development needs. Thus, new loans often failed to generate enhanced export earnings or sustainable economic growth.

In the past years, the World Bank and IMF have shifted to more concessional loans for highly indebted poor countries. Concessional debt now accounts for over two thirds of total multilateral debt compared to about one half a decade ago. Recently, rich donor countries have agreed to top up IDA by US\$ 11 billion over the next three years.

**IDA loans to developing countries in bn\$**



More than half of the multilateral debt outstanding at the end of 1993 was owed to the World Bank. IMF lending dropped dramatically, from over 29% in 1988 to less than 12% in 1993<sup>1</sup>.

Growing arrears on multilateral debt are usually the first indicator for an unsustainable debt situation. Of the 41 highly indebted countries, only 3 were servicing their debt on time in 1994. Given the fact that an overall debt service ratio of 20 per cent represents the critical threshold, and multilateral debt represents about half of total debt service for the heavily indebted low income countries, a multilateral debt service ratio of ten per cent can be considered as critical. For 16 HIPC, the average ratio for 1990-1993 exceeded 10 per cent.

Current multilateral debt relief schemes by IMF and World Bank focus on refinancing loans which were contracted on hard terms with concessional funds. In the past years, the World Bank ceased non-concessional lending to seriously indebted low income countries and switched to IDA lending only. This strategy has helped poor countries to cope with the heavy contractual obligations from IBRD loans while maintaining positive transfers. The IMF also reacted by introducing the Structural Adjustment facility (SAF) and the enhanced

Structural Adjustment facility (ESAF) which was enlarged in 1994, to provide highly concessional finance to poor borrowers.

Regional development banks provide soft window loans as well, but their resources are limited.

Most Multilateral Financial Institutions (MFIs) have introduced schemes to deal with protracted arrears, such as the Rights Accumulation Programme (RAP) of the IMF, which provides a framework for countries with protracted arrears to establish a satisfactory track record on policy and payments performance, and the Additional support programme of the World Bank, which allows the countries to accumulate rights to disbursements which are released upon clearance of arrears. In addition, the World Bank introduced interest rate waivers of 25 basis points when payments are made within one month of the due date.

In 1988, the World Bank introduced the 5th dimension lending facility within IDA which provides supplementary IDA resources to assist countries in meeting interest payments on outstanding IBRD debt.

#### Options for further debt relief:

Obviously, existing multilateral debt relief schemes are insufficient since the problem of arrears has not been eliminated. In order to avoid a widespread crisis, which would also affect the MFI's financial position, additional measures have to be undertaken. UNCTAD's TDR 1995 states the following options for further debt relief:

#### Improving current schemes

Interest payments on arrears and current debt service obligations could be suspended during the programme of rights accumulation, so that negative transfers will be avoided. These obligations could then be rescheduled on softer terms.

Extending existing schemes, such as the 5th dimension scheme, to other MFIs like regional development banks. This could help poor countries refinance their loans on softer terms.

#### Debt Rescheduling or debt reduction:

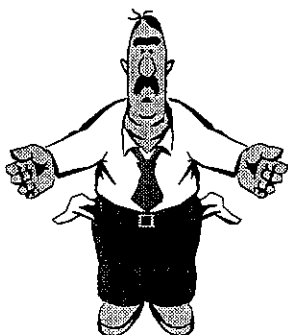
The effect of the measures taken by MFIs so far are of limited scope since they focus on providing new loans on concessional terms. For countries where an economic recovery is not foreseeable in the near future, a bolder strategy is necessary. For current schemes, insufficient funding was the principal constraint. To provide for greater debt relief, additional resources have to be mobilised. For this purpose, a number of proposals have been made, with the aim of limiting the diversion of

<sup>1</sup> see UNCTAD, Trade and Development Report, 1995

development assistance to the alleviation of debt servicing and lessening the pressure on bilateral donors, many of whom are reducing their aid programmes. Additional funds could serve refinance or reduce the debt burden of poor countries.

### Recent Proposals for Multilateral Debt Relief

In July 1995, a World Bank Task Force proposed a Multilateral Debt Facility aimed at reducing the overall debt burden of Highly Indebted Poor Countries (HIPC) to a sustainable level. According to the Financial Times article of 14 September 1995<sup>2</sup>, the MDF would be organized as a \$11 billion trust fund, from which principal or interest payments on multilateral debt would be serviced or prepaid as they fall due on behalf of the debtors over a specific period of time. An unsustainable debt burden, a track record of good performance and prior debt reduction agreements with commercial banks and official bilateral creditors are among the eligibility criteria. The trustfund would be financed from the bank's surplus income and by donor's aid.



A joint plan with the IMF for comprehensive reduction of HIPC debt will be presented at the World Bank and IMF spring meetings in April 1996. It suggests reducing all external debt - bilateral, commercial and multilateral - to sustainable levels.

This could involve Paris Club rescheduling of flow and stock of up to 90 percent from 67 per cent currently available and providing new financing from multilateral lenders<sup>3</sup>. An unsustainable debt burden is defined as an expected ratio over ten years time of debt service payments to export revenues of more than 20-25%, and of debt stock to exports of 200-250%. Those countries whose debt is likely to fall below this threshold within five years are deemed to be in a sustainable position. It is expected that between 8 to 20 poor countries could benefit from the proposal.

<sup>2</sup> Holman, Michael, 1995, World Bank plans 11 bn\$ debt fund, Financial Times, 14 September 1995

<sup>3</sup> Holman, Michael and Paty Waldmeir, 1996, World Bank asked to approve debt plan, Financial Times, 14 March 1996, and "Poor Nations Debt Burden lies heavily on World Bank minds".

While the IMF/World Bank proposal stressed that multilateral debt will not be written off or written down, the TDR 1995 of UNCTAD goes further. It proposes a number of options to raise additional resources for refinancing, or if necessary, reducing the multilateral debt of poor countries:

### Sale of IMF gold

The sale of 10-15 % of the IMF's gold reserves could already provide meaningful relief. Opponents argue that such a sale could weaken the solid financial base the IMF needs to back its operations. However, the fund has the firm political and financial support of major developed countries and its central role in world finance is widely recognised. These factors count more than the level of the fund's reserves. To avoid a detrimental effect on the world price of gold, the sales could be phased over a certain period.

Other possibilities, mentioned in UNCTAD's Trade and Development Report, are:

### Special allocation of SDRs to provide multilateral debt relief

The possible inflationary effect of increased global liquidity from a special SDR allocation for this purpose would be minimal, as the amount involved is relatively small. However, the operation would require the amendment of the Fund's Articles of Agreement. Alternatively, part of a general allocation of SDRs which was requested by the managing director of the Fund in 1994, could be voluntarily set aside for debt relief.

### Drawing on the reserves and loss provisions of Multilateral Financial Institutions.

Most MFI's have set aside substantial provisions and/or reserves to cover potential losses arising from non-payment of debt due to them. Consideration could be given to the use of a small proportion to write down the existing stock of non-concessional loans of poor countries, refinance it on IDA equivalent terms, or finance an up-front clearance of arrears.

Clearly, the relief of poor countries debt will require the concerted effort of all parties concerned. The approach should deal with the stock of arrears and provide new financing at concessional rates to stop the vicious circle of borrowing in order to pay the obligations of previous debt. But debt relief and new financing is only one side of the medal: It will also need efforts to use these funds in a productive way to increase the export earnings of the poor countries and improve their development prospects.





## Questions to the DMFAS

In this section, we answer technical questions that be of interest to all our users. In this issue, we discuss questions regarding DMFAS 5.0.

### WHAT IS NEW ABOUT DMFAS 5.0?

**Q:** What is a Relational Database Management System?

**A:** In general, a relational database system (RDBMS) is a complex software system that manages data. The relational database model is a well defined theoretical model for working with and managing a set of data. It attends to three specific aspects: **Data structure, data integrity and data manipulation.** The **structure** of the RDBMS organises databases into tables (formally called "relations") Each table contains data about one subject (loans, for example) and each data item is stored as a column (also called field) in the table. A table can have any number of rows (also called records). **Data integrity** means that all of the data is valid according to a set of rules. **Data manipulation** in a RDBMS is done through an access language that is based upon the principles of relational algebra: usually the Structured Query Language (SQL). SQL provides the tools for adding, changing, deleting and retrieving data.

**Q:** What are the advantages for DMFAS 5.0 of an RDBMS?

**A:** The main advantages for DMFAS 5.0 are improved facilities for security, multiple users, validation and accessibility of data. Security is improved by the automatic protection of the data against unauthorised access and use. The multiple-user capability of RDBMS makes it possible for several users to work with the data at the same time, as may be necessary in a network. Validation

is improved through the RDBMS facility for automatically checking the data against a number of pre-defined rules. Accessibility of the data is improved because the RDBMS provides variable and easy access to stored data, thus making it much easier for the user to create reports without the help of the computer programmers.

**Q:** How does Windows facilitate the use of DMFAS 5.0?

**A:** There are many advantages for the user. For example, it is possible to use multitasking: The user is now able to run DMFAS at the same time as other applications and to easily switch between applications. This means one can now copy, cut and paste information from one field to another and even from one application to another. Moreover, it is possible to access the database with other applications directly.

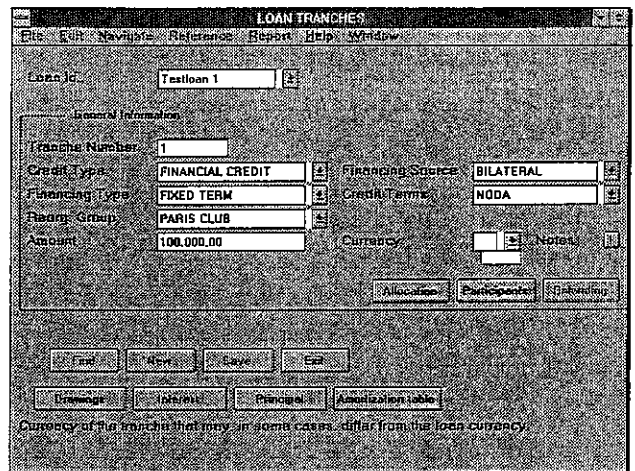


Figure 1: DMFAS 5.0 Tranche Screen

**Q:** What type of agreements can be registered in the new system?

**A:** Basically all types of agreements that could also be registered in the previous version of DMFAS 5.0 has special provisions to register currency pool loans, secondary market shares, amendments to loan agreements, and it allows to maintain the record of the loan status throughout the lifetime of the loan. Moreover, it has special provisions to record grants, domestic debt, on-lending agreements, composite agreements, projects as well as budget and project allocations, and it contains a module for debt reorganisation agreements.

**Q:** Why was the structure of the main menu changed?

**A:** The main menu of DMFAS 5.0 has a new structure to represent the life cycle of the loan. It spans the registering of basic loan data when the loan is still in the pipeline to the registering of real disbursements and debt service payments, managing arrears, buy backs swaps and rescheduling. Reports can be produced from any option of the menu relating to this option, or from the reports menu.

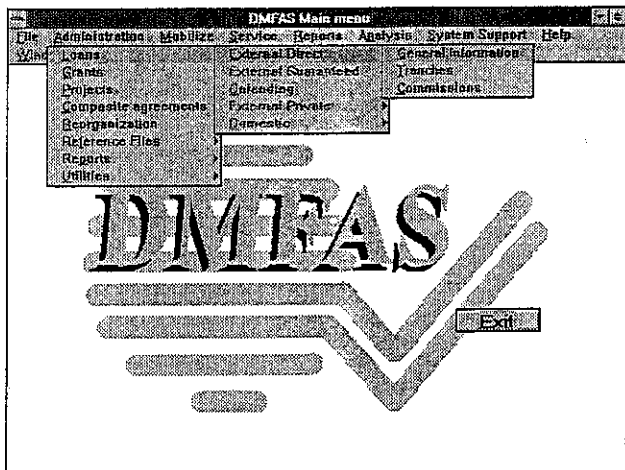


Figure 2: DMFAS 5.0 Main Menu

**Q:** Can the user apply his own loan identification?

**A:** DMFAS 5.0 enables flexible loan identification, so that the user can use his own codification standards and is not limited to pre-defined numeric identification.

**Q:** What is a tranche and why was this introduced in the new system?

**A:** A tranche is an autonomous entity with its own principal repayment schedule, its own currency and its own interest terms based on fixed or variable interest rates. It may, in addition, have its own participants. A tranche represents a distinct part of a loan as defined by the creditor in the detailed payment schedules he provides to the debtor. Each individual amortization table defined by the creditor is represented by the individual tranche in the system. Tranches are identified by a unique reference and by their own amortization table. Every loan must have at least one tranche. The notion of tranches was introduced to facilitate the recording of specific loans such as loans reimbursed in several currencies, or loans for which each disbursement has a specific interest rate. Currency and interest rate was in 4.1Plus an attribute of the loan rather than a payment schedule (tranche in 5.0).

**Q:** What are the new reporting features and what does flexible column definitions allow the user to do?

**A:** With version 5.0, the user can create his own reports and apply country specific formats without the intervention of programmers. Data Browser allows the user to execute queries combining different data fields. The user will select the individual columns of a report from a list of columns defined by the DMFAS system developers and put them together according to the user's own specifications. This enables, for instance, the combination of stock and projection columns in the same report. The procedure followed for the creation of reports in DMFAS is the same as for previous versions of the system; the user starts by defining a sub-set of loans to work with, then sorts this sub-set and finally defines the report parameters, such as the currency, the periodicity, the level of detail etc.

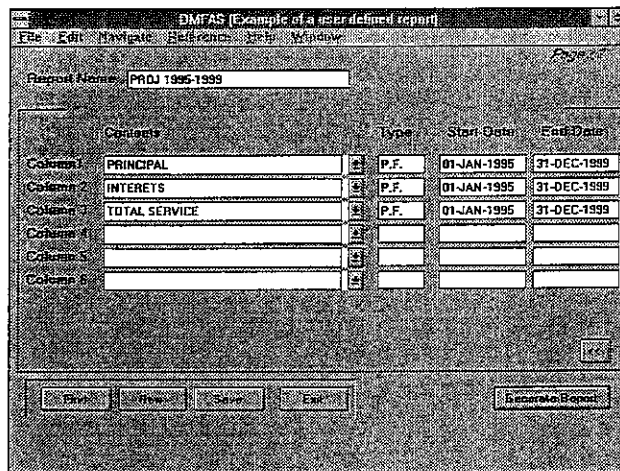


Figure 3: DMFAS 5.0 Reports on screen

**Q:** How does the selection component work in DMFAS 5.0?

**A:** The selection component was replaced with a customised Oracle's Data Browser in version 5.0. This software, which is included in the Oracle Discoverer set, is used for creating subsets from the database and sorting them. Every subset created can be saved for later use, which was not possible in 4.1Plus.





# Mission Round



## DMFAS 5.0 INSTALLATIONS:

During the second half 1995, DMFAS 5.0 installation missions were carried out to Argentina, Bangladesh, Romania, Zambia, and Paraguay. The DMFAS missions were composed of members of the technical team, who carried out the installations and database conversions, and financial economists, responsible for project management, the training of the users and for project tasks. In Argentina, the interface with the SIDIF, the Argentinean Financial Administration system (see Newsletter No. 8) was installed and tested during a second mission. Argentina is now able to update financial information generated with the DMFAS in the SIDIF and vice versa, print payment orders and disbursement requests.



While most countries opted for a network installation either as a local area network or a wide area network, Zambia received DMFAS 5.0 in a single user environment. Except for Paraguay, which is using a UNIX server and workstations running Windows, DMFAS 5.0 was installed on Novell networks.



## TRAINING MISSIONS:

Training missions took place to Ecuador in September, during which a consultant provided training in DMFAS 4.1 Plus, and to Bolivia in November-December 1995, during which a consultant verified the database and provided advanced training in the use of DMFAS 4.1Plus.



## NEEDS ASSESSMENTS:

In addition, the DMFAS team carried out needs assessment missions to a number of Latin American, South East Asian and African countries. During these missions, the DMFAS

staff analysed the institutional environment for debt management, its organisational set-up as well as the institutions technical capacity and debt information flows. Following the missions, project proposals were submitted to more than 10 countries, some of which have already been approved and have become full fledged projects awaiting DMFAS 5.0 installation in 1996.

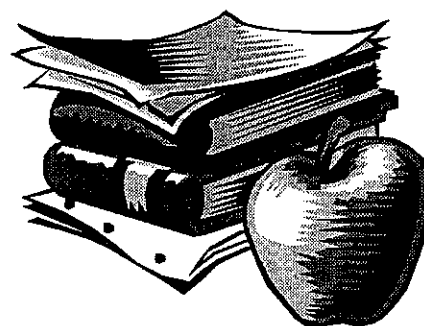
## Recent UNCTAD Publications:

### Multilateral Debt of Least Developed Countries

Luisa E. Sabater

UNCTAD Discussion Paper no. 107, Nov. 1995

The paper reviews the recent developments in the multilateral debt of least developed countries since the beginning of the debt crisis of the early 80's. Multilateral debt has grown rapidly, and constitutes a serious problem for a number of LDCs. The paper provides an overview of the scope of the problem based on debt indicators, and reviews and evaluates existing debt relief schemes. It suggests measures to strengthen and improve those schemes and presents other options such as debt reduction under exceptional circumstances as well as proposals for financing debt relief measures. While the discussion focuses on LDC's, it must be stressed that there are other low and middle income developing countries with severe multilateral debt problems.



# Technical Focus

## CUSTOMISING SPFPC

If you have not changed the SPFPC's parameters (the file SPFPC210.PRM) after installing DMFAS 4.1Plus, your PageDown key might not work as you would expect by scrolling page by page, but it will scroll half a page at the time. To change this for a certain file type (e.g. \*.PRN files, which would affect all DMFAS 4.1Plus reports which are named PRINTOUT.PRN), change HALF that appears in the upper right corner of the screen to PAGE next time you are editing a DMFAS 4.1Plus report, by pressing the **Home** key, then the **Tab** key and then typing **PAGE**.

```

EDIT1          C:\DEBT2\printout.prn-----
COLUMNS 0001 0072
COMMAND
SCROLL ----> PAGE
*****
*****          *****          TOP      OF      DATA
*****          *****
000001
000002 NATIONAL DEBT
000003 MANAGEMENT
PA
CLIENTS BY CLIENT NUMBER
    
```

Figure 4 : SPFPC screen

If your PC has an EGA or a VGA screen/adaptor, you also have the possibility of showing 43 lines (EGA screen), or 50 lines (VGA screen) on the screen at a time instead of 25 which is the default setting. To set this up from SPFPC, start SPFPC by entering **SPFPC** from the C:\DEBT2 prompt, enter SPFPC parameter options by pressing **0** SPF/PC PARMS, **4** OPTIONS, and change the video adapter to **2** (EGA) or **3** (VGA). Then, press **F3** once to get back to the SPF/PC PARAMETER OPTIONS, and press **1** for TERMINAL. Change the SCREEN FORMAT to MAX instead of STD, press Enter and press **F3** until you get the DOS prompt. Next time you start SPFPC, you will see 43 or 50 lines at a time.

## PROCESSOR NEWS

Intel, the manufacturer of 80486 and Pentium processors, has released a new processor family, which is called **Pentium Pro** and not P6 as expected. The processors are available in 150, 166, 180 and 200 MHz. These processors are designed to deliver the performance required for powerful 32-bit software, and are **not targeted** for Windows 3.x and Win-

dows 95. Actually, Windows programs might even run more slowly on these new processors compared to a Pentium processor, as the new processors are designed specifically to handle pure 32 bit operating systems, such as Windows NT. For Windows 3.x and Windows 95, the normal Pentium processor is a better choice, and it is now available in 150 and 166 MHz versions as well.

## INTERNET

Internet is a world wide network of thousands of interconnected computers (mainly mainframe computers), which themselves have connections to mil-

lions of PCs (see Figure 5 : Internet), and all these PCs and mainframe computers can communicate with each other. Internet today has grown to a network covering

all five continents, and provides several useful services, of which we will look at the two most known, E-Mail and Web browsing.

**E-mail** (electronic mail) can be used on a LAN (local area network) to send documents in the form of PC files between colleagues in a building. By connecting the LAN's server to an Internet provider (usually a mainframe computer connected to Inter-

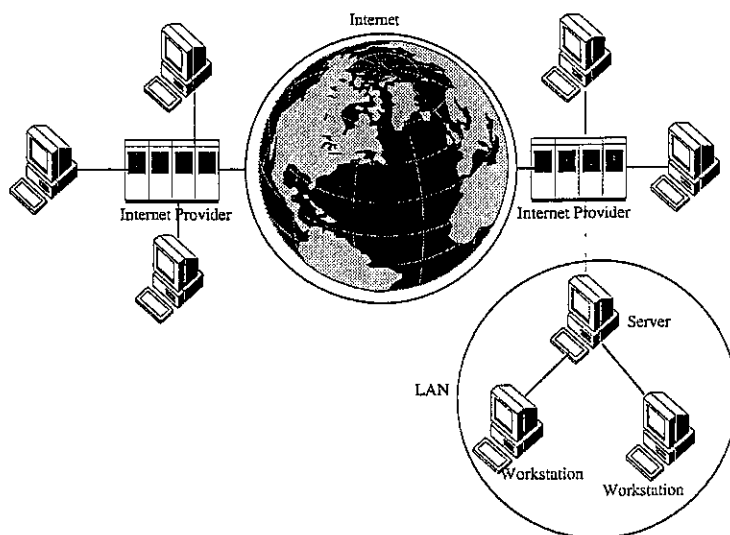


Figure 5 : Internet

net) as shown in Figure 5, the users will have the possibility to send E-mail to any of the millions of other users on Internet. Using an E-mail software, the sender gives the user's unique e-mail address in the form *userid@location*, DMFAS E-mail address is **DMFAS@UNCTAD.ORG**. As any PC file can be sent, the mail is not restricted to text documents, but can also include PC programs, spreadsheets, database files etc. For the DMFAS Programme, this has been very useful on some of our DMFAS 5.0 installation missions to our user countries, where we have sent updated DMFAS 5.0 programs from Geneva via E-mail to colleagues in a matter of minutes or hours, instead of using normal mail which takes days.

**Web Browsing** or "Web surfing" is a way of using specialised software to search for, retrieve and send information on Internet. The Web is a constellation of resources (documents, programs, pictures, sound etc.) on computers connected to Internet, that can be accessed using a Web browsing software, such as Netscape. Numerous computer companies, newspapers, private persons, universities etc. place information on their Internet connected computers, and make it accessible for any user. The user types in the Web site's unique address in an address field (e.g. [HTTP://WWW.ORACLE.COM](http://WWW.ORACLE.COM)), and the sites home page will be presented (see Figure 6, UNCTAD's Home Page). The home page is similar to a table of contents of information that can be found on that site, with buttons, hot-spots (underlined words or graphics) that the user can click on to move around (in a similar way as with a Windows on-line help system). Depending on the site, the user may be able to >search for information, >download (retrieve) files/programs to their local PC, >send in questions to the site (e.g. requesting information about a product) etc. In the DMFAS Programme, we have been browsing the Web to > retrieve evaluation versions of Oracle's

newest software, >retrieve updated versions of software for our PCs' video card, CD-ROM drives, >retrieve useful public domain (free) utilities, > searching for information regarding trouble shooting software we are using. The DMFAS programme will prepare its own homepage in the near future.

To be able to use Internet, you will need either a 1) PC with a modem, a phone line and a phone number to an Internet provider, or 2) a PC connected to a network which again is connected to Internet. Internet providers are not yet available in all countries. To find out if it is available in your country, check with your local phone company.

### MOUSE CLEANING

You might have noticed that the cursor does not move as smoothly as before when you are using the mouse. In that case, it is time for mouse cleaning. The mouse ball is constantly picking up dust from the table, and the dust gets stuck inside the mouse. Turn the mouse around, remove the mouse ball, and

use a pair of tweezers or a clip to remove dust from the small rubber wheels inside. This procedure should be repeated regularly, to keep the mouse in good shape.



Figure 6, UNCTAD's Home Page

## UNCTAD IX IN SOUTH AFRICA

UNCTAD will hold its 9th conference at Gallagher Estate in Midrand, Johannesburg, from 27 of April to 11 May 1996. UNCTAD IX will concentrate on two of the central features of the world economy today, namely globalization and liberalization. UNCTAD will examine how to assist developing countries in coping with these phenomena, mitigate the undesirable effects and maximise the gains to be reaped. Emphasis will be put on trade, production and finance. The agenda of the conference as well as the information can be downloaded from the internet at <http://www/unicc.org/unctad/>.

UNCTAD's technical co-operation programmes, among which the DMFAS, will be represented at the conference and give presentations of its activities and achievements.

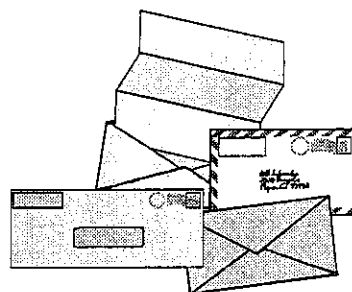


Ms. Isabella H. Mackie left the DMFAS team and UNCTAD to take her retirement after more than 30 years of service for the United Nations. For more than 8 years, she managed the destiny of the DMFAS programme as programme officer. We would like to thank her for the excellent work she provided and the wonderful team spirit we enjoyed thanks to her warm and fair personality. We wish her all the best for her retirement.

In November 1995, Mr. Gilberto Zabala joined the team as a documentation specialist. He is contributing to the development of a comprehensive set of documentation for DMFAS 5.0.

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