CONFÉRENCE DES NATIONS UNIES SUR LE COMMERCE ET LE DÉVELOPPEMENT



UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

### **The DMFAS Programme**



## **A BRIEF DESCRIPTION**

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#### 1. WHAT IS THE DMFAS PROGRAMME?

UNCTAD's DMFAS Programme provides technical assistance in debt management to developing countries and economies in transition. The activities organised in the framework of DMFAS technical cooperation programme aim at (a) providing assistance in developing effective debt management strategies; (b) providing direct assistance to debt offices with its products and services including capacity building; (c) providing or serving as a focal point for discussion and exchange of experiences with debt management; (d) maintaining and improving state of the art debt analysis and management systems; and (e) supporting institutional development.

The central component of the assistance provided by the DMFAS Programme is a computerised system for debt management, the Debt Management and Financial Analysis System (DMFAS). The DMFAS is designed to strengthen the technical capacity of developing countries to record and monitor their external debt. The system was first conceived over seventeen years ago, as a result of UNCTAD's support to developing countries in preparing for the Paris Club, where negotiations for rescheduling bilateral debt are conducted. The technical assistance provided by UNCTAD in debt management also includes, based on UNCTAD's theoretical framework *Effective Debt Management*<sup>1</sup>, advice on institutional, legal and administrative issues, and training in the DMFAS and debt management.

UNCTAD has established itself as one of the leading international organisations in this field, and has played an important role in promoting better understanding of debt management in developing countries. Over the last five years, the DMFAS Programme has expanded rapidly in all regions of the world. At present, the Programme is collaborating with approximately 60 countries.

Africa	Asia	Latin America & the Caribbean	East Europe and CIS
Angola	Bangladesh	Argentina	Albania
Burkina Faso	Indonesia	Bolivia	Belarus
Burundi	Iran	Colombia*	FYR of Macedonia
Central African Republic	Jordan	Costa Rica	Georgia
Chad	Lebanon	Dominican Republic	Kazakhstan
Côte d'Ivoire	Pakistan	Ecuador	Lithuania
Djibouti	Palestine Authority	El Salvador	Moldova
Egypt	Philippines	Guatemala	Romania
Ethiopia	Syria*	Haiti	Turkmenistan*
Guinea*	Viet Nam	Honduras	Ukraine
Guinea Bissau	Yemen	Nicaragua	Uzbekistan
Madagascar*		Panama	
Mauritania		Paraguay	
Rwanda		Peru	
Sao Tome & Principe		Suriname*	
Senegal		Trinidad and Tobago	
Sudan		Venezuela	
Togo			
Uganda			
Zambia			
Zimbabwe			

\* Projects in Pipeline

The DMFAS is usually installed in central banks and/or ministries of finance. Installation and training activities are carried out within the framework of a technical cooperation project, funded by UNDP and other

<sup>&</sup>lt;sup>1</sup> Effective Debt Management, UNCTAD/GID/DMS/15/Rev.1.

sources, including governments themselves. The project typically addresses the institutional and administrative environment within which the DMFAS is required to operate, as well as the hardware and training requirements needed to run the system.

The DMFAS Programme consists of a core team, based in Geneva, funded from regular and extra-regular resources. Since 1995, it has received substantial funding from bilateral donors, including Belgium, Denmark, Finland, Ireland, Italy, the Netherlands, Norway, Sweden and Switzerland. The DMFAS team (actually nineteen professional and two general service staff) consists of the information technologies staff, who are responsible for the development and maintenance of the DMFAS, and the financial economists, who are mainly responsible for the design, implementation and management of projects. The team is led by the Chief of the DMFAS Programme. The core team is supplemented by consultants who work for short periods on particular projects, and chief technical advisors who work in the field for the implementation of long-term projects.

The activities of the core team include:

- development of the DMFAS and the documentation to accompany it,
- software support (DMFAS "Hot Line"),
- DMFAS demonstrations,
- country needs assessments,
- design of country projects,
- management of pipeline and active projects,
- provision of information material (including the DMFAS Newsletter),
- delivery of training activities, and
- attendance as resource persons at debt management seminars.

Wherever possible, the DMFAS programme promotes and participates in regional or sub-regional projects in support of its country activities and seeks collaboration and partnerships with existing regional organisations who wish to support the efforts of their member countries in the area of debt management. An important example is the collaboration with the Macroeconomic and Financial Institute of Eastern and southern Africa (MEFMI), where UNCTAD is a co-operating partner. A similar regional initiative for Francophone Africa has recently been launched by the Banque Centrale des Etats d'Afrique de l'Ouest (BCEAO) and the Banque des Etats d'Afrique Centrale (BEAC). The DMFAS programme is establishing a joint work programme and will closely collaborate with the activities foreseen in the debt management component of this initiative.

One of the objectives of the DMFAS Programme's training curriculum in debt management is to assist governments in improving their capacity for training and retaining personnel. UNCTAD assists in this process by facilitating the organisation of national workshops, seminars, on-the-job training, etc. For example, in 1998 and 1999 a training curriculum for capacity building in debt management in Eastern Europe and the Commonwealth of Independent States (CIS) has been implemented in collaboration with the United Nations Development Programme (UNDP) and the United Nations Institute for Training and Research (UNITAR).

The inter-regional conference on debt management, which was held for the first time in Geneva in December 1997, has now become a regular activity organised on a biennial basis. The last conference held in April 2000 was attended by more than 200 participants from over 60 countries. During the three-day conference more than 30 experts from different countries and financial institutions presented their views on the debt management function in today's economic environment; financial tools and risk management; and financial management issues.

In response to the need expressed by a large number of countries for a regular exchange of experiences, know-how and information about debt management at the international level, UNCTAD helped to establish the World Association of Debt Management Offices (WADMO) in April 2000. The Association's main objective is to offer debt management professionals a forum in which to discuss technical matters of common interest.

#### 2. WHAT IS THE DMFAS?

UNCTAD's Debt Management and Financial Analysis System (DMFAS) is a computerised system designed to provide accurate and timely debt information for the purpose of effectively managing debt. The latest version, DMFAS 5.2 was released in early 2000. Like the previous version of the system, DMFAS 5.2 is available in English, French, Spanish and Russian. One of the most important new features of this version is the link with the World Bank's Debt Sustainability Model, DSM+. UNCTAD signed a partnership agreement with the World Bank and the Commonwealth Secretariat on the further development and dissemination of the World Bank's analytical tool. UNCTAD is responsible for the distribution of this tool to its client countries and, on their request, for the training of relevant officials in its use.

DMFAS can be run on a stand alone PC or on a network and can be installed on most operating and network systems. DMFAS is a Windows<sup>TM</sup>-based application which uses Oracle, the most widely used relational database system in the world.

#### Features of DMFAS 5.2

The DMFAS allows the user to follow medium- and long-term debt, both public and private and on-lending operations. Short-term debt, domestic debt and grants may also be registered within the system. The DMFAS is used to provide reports on all data relating to the loan's general information such as loan terms, clients, related agreements, and loan transactions.

In particular, the DMFAS is used to:

- record all information concerning loans and grants, including their possible relationship to projects and to different national budget accounts,
- calculate the present value of loans,
- create and update estimated disbursements automatically,
- record actual transactions in the loan ledger,
- identify loans where debt service is in arrears and calculate penalty payments,
- automatically calculate amortisation tables based on the information contained within the database,
- calculate projections based on outstanding using the pro rata and the truncation methods,
- produce a larger number of different standard and user-defined reports for validation and control.

The DMFAS contains a number of **pre-defined reports** (such as the amortization table, the loan information sheet, the tranche information sheet, etc.) and offers the user the possibility to design his **own reports**. The flexibility of the reporting module facilitates the production of debt statistics using codes that follow international standards for debt statistics. The number of possible user-defined reports is nearly unlimited, as most fields and codes can be used as selection criteria. The system also automatically generates reports that the World Bank requests from its borrowing countries. Aggregate reports can painlessly be produced in local currency, US dollars, EURO or SDR. The system can also be specifically programmed to produce drawing requests and payment orders.

DMFAS 5.2 includes an **analysis module** that has been specifically designed to calculate projections based on outstanding and the present value of a debt portfolio. This module enables the user to select different parameters and calculation methods, of particular interest to produce and compare different scenarios in the context of the HIPC Initiative. The interface between DMFAS and DSM+ gives the user the possibility to directly export data to the DSM+ system.

The DMFAS offers **security features** that prevent unauthorised personnel from viewing or editing the data and assigning different levels of access to different users. The access to the database is controlled by a database administrator.

The DMFAS is supplied with a set of **documentation** including manuals and reference guides, a debt glossary, as well as documentation on general debt management procedures.

The design of the DMFAS system allows for easy customisation and adaptation in accordance with the needs and preferences of each client institution. In addition, the DMFAS technology offers a lot of flexibility permitting its **integration in other systems**, leading to the creation of so called "integrated financial systems".

# 3. WHAT IS NEEDED FOR A SUCCESSFUL INSTALLATION AND OPERATION OF DMFAS?

Computer-based debt management systems (CBDMS), both standard (such as the DMFAS) and tailormade systems for a particular country, have been in existence for almost two decades. From experiences gained through the installation of DMFAS systems in different countries, UNCTAD provides advisory services on administrative and institutional issues to ensure the success of its projects. Several factors appear to be particularly important for a successful installation and operation of such systems.

There should be well defined institutional arrangements including an adequate legal authority and an appropriate administrative framework. Functions and responsibilities have to be clearly defined, and the unit collecting data has to be given the necessary authority and responsibility to adequately perform its functions. Moreover, the location of the unit in which the CBDMS is installed has to be well planned to ensure an optimal exploitation of the system. Generally, it is located in a unit in the Ministry of Finance or the Central Bank.

In addition, strong commitment from senior officials during and after installation is another key factor, as is a stable, well-motivated, and well-trained staff. Therefore, policies to retain staff have to be developed.

Technical support is another important factor. Adequate hardware maintenance must be provided. The DMFAS technical staff provides support through its Hot Line in Geneva via phone, fax and e-mail on the Internet.

An in-depth knowledge of the CBDMS is necessary and has to be accessible at any time. However, it must be emphasised that good information in itself is not a sufficient condition for an effective debt management system. Analysis and control must follow and contribute to policy-making.

#### 4. WHAT IS EFFECTIVE DEBT MANAGEMENT?

In addition to information and computerisation of information systems, effective debt management encompasses such issues as administration, functioning of an office, communications, legal authorisations, analysis of credit, balance-of-payments and budget, controlling borrowing and defining strategies, as well as training and retaining staff.

Debt management has two dimensions: the macro-economic and the micro-administrative. In the former, debt management must be seen as an integral part of a country's overall macro-economic management; in its micro-administrative dimension, it is part of a broader process of public administration and management.

In order to take into account the many issues and the two dimensions of debt management, the DMFAS Programme has developed a conceptual framework which sketches out the requirement of effective management of a country's external debt and presents a tool for its understanding and implementation of the corrective measures involved. This conceptual framework is explained in the document *Effective Debt Management*, published by UNCTAD and available on request.

Effective debt management involves primarily seven basic functions: policy, regulatory, researching, recording, analytical, controlling and operating functions. The first three functions are part of what can be called **Executive Debt Management**. The other four functions may be considered as part of **Operational Debt Management**.

Executive Debt Management might be viewed as the establishment of the 'rules of the game' by the highest levels of government. It thus gives direction and organisation to the whole which might be called the **Debt Management System**.

Operational Debt Management is the day-to-day management of debt in accordance with executive direction and organisation. Operational debt management may in turn be viewed as being composed of **passive and active debt management**. Although the dividing line is not always clear, the former involves functions which do not include actions (interactions and transactions) on the debt front, while the latter does. It is obvious that passive management will strongly influence active management through the provision of information and analysis, and is of equal importance.

In general, the various functions of debt management are not performed by the same government agencies. There is no universally accepted textbook model for optimizing debt management units and their related functions. Each country will have its own system with units both in the Ministry of Finance and the Central Bank performing some or all of the functions. The important issue is that all functions are being performed and that all units co-operate and communicate effectively within an integrated and clearly defined institutional environment.

## 5. HOW DOES A COUNTRY OBTAIN THE DMFAS AND TECHNICAL COOPERATION FROM UNCTAD?

The Government has to request UNCTAD to field a needs assessment mission to its country in order to evaluate the situation and discuss the activities to be undertaken. A project proposal will then be submitted to the Government, as well as to potential funding agencies. As UNCTAD itself does not finance the activities, country projects are financed by UNDP and other multilateral institutions, bilateral donors and/or the Government itself.

The project can include a wide range of activities including procurement to the country of equipment, training missions by DMFAS consultants and/or DMFAS central staff members, specific advisory missions on institutional and procedural issues, participation of government officials in the annual DMFAS training seminars in Geneva (or regional location) and study tours for government officials to other DMFAS client countries.

It should be noted that in some parts of the world where a large number of countries use the DMFAS, a regional support project can also be elaborated.

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