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DATA COLLECTION SYSTEM FOR THE BALANCE OF PAYMENTS AND INTERNATIONAL TRADE IN SERVICES

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The purpose of this paper is to present the Eurostat's point of view regarding balance of payments data collection system.

- Part A is a document discussed at the last balance of payments working party (3-5 July 1990). This document indicates the Eurostat's recommendations regarding balance of payments data collection system. Parts IV and V of the original document have been deleted in order to be taken into account in a more developed form in parts B and C of the present document.

- Part B presents a comparison between "general direct reporting systems" and "surveys systems" in order to explain why Eurostat prefers general reporting systems.

- Part C presents developments of Electronic Data Interchange (EDI) in the field of the financial messages and explains how these messages could provide the appropriate information to balance of payments while improving quality and lowering costs.

This paper is based on studies drawn up by different Member States' experts and has been refined in the light of exchanges of view, in particular at the last working party meeting (3-5 July 1990).

A. EUROSTAT'S RECOMMENDATIONS REGARDING BALANCE OF PAYMENTS DATA COLLECTION SYSTEM

I. Introduction

1. At present the data collection systems of most Member States are being completely reorganized, mainly owing to the abolition of exchange controls

   - Spain, Ireland, Greece and Portugal will soon abolish exchange controls;
   - the Benelux economic union is adjusting its system;
   - Denmark is planning to change its system;
   - Italy has just prepared a new data collection system designed to provide more reliable and detailed information, but it is experiencing certain difficulties in implementation.

2. There is increased need for information at Community level

   - It is planned (Report on Economic and Monetary Union in the European Community, p. 51) to establish "a process of multilateral surveillance of economic developments and policies based on agreed indicators". This implies compiling reliable up-to-date statistics, and, at least in the case of certain general indicators, at monthly intervals.
   - The Uruguay negotiations should result in the establishment of a multilateral agreement on trade in services. The future development of this process of liberalization will require detailed information on international flows of services broken down by type of service and by partner country. A fundamental requirement on the part of the Commission as well as its other trading partners will be access to comparable credit and debit data as well as a geographical breakdown of flows.

3. The statistics of Member States must respect certain criteria and comply with certain objectives

   - they must be harmonized so as to be able to aggregate Member States data to obtain correct information at Community level
   - be reliable
   - be sufficiently detailed by type of transaction: this is particularly important for international trade in services
   - be broken down geographically: this is very important for international trade in services but also for certain aggregates, the most important being the total of current transactions. The breakdown intra/extra is of course essential for drawing up the aggregate "EUR12"

- allow comparability of credits and debits: the same breakdown must be used for credit transactions and debit transactions; the data must be statistically comparable and allow balances to be worked out (credit-debit);
- provide a correct evaluation of flows: balances are not the only interesting data; it must be possible to evaluate the volume of each type of transaction;
- provide cyclical (monthly) information for certain indicators, in particular the balance on current account.

4. With this in mind Eurostat has carried out some work, in cooperation with experts from central banks and statistics institutes, on:

- general methodological aspects, in particular classifications;
- data collection systems.

On the basis of this work it should be possible to gradually draw up a compilation guide to the balance of payments of the Member States. Where the data collection systems are concerned:

- an initial Eurostat document presenting some proposals on the "Improvement of the data collection system in respect of international trade in services" (BP/89/4) was discussed at the meeting of the Working Group 17-19 April 1989;
- some Member States prepared very detailed information which was circulated to the working group. This contained the description of the collection systems of:

Germany	(BP/89/20)
France	(BP/89/4/Annex 2)
Netherlands	(Composition of the Balance of Payments in the Netherlands
United Kingdom	(BP/89/4/Annex 3)

- Italy benefited from a technical aid mission comprising Eurostat officials and experts from some central banks. The object of this mission was to advise the Italian authorities on implementation of their new collection system. The recommendations were included in the document "Analysis and principal recommendations of the group of experts" (18 September 1989).

- Four reports were drawn up by experts from the Banque de France, the Nederlandsche Bank, the CSO and the Bundesbank, as provided for in a Eurostat work programme and given in Annex (Report on the statistical systems for international trade in services - Programme). The objective was to provide Eurostat with additional information enabling recommendations to be made at Community level.

5. It is on this basis that these recommendations were drawn up. **These recommendations are general guide-lines for the Member States which are currently reorganizing their information system. Their objective is to indicate the direction which these changes should take so as to make them most appropriate from the Community point of view. It is important that the Member States consider these recommendations when they are making choices which will determine their statistical system in the medium term.**

These guide-lines are general because obviously arrangements for the collection of data must be adapted to each Member State: the very varied systems which exist in some Member States (Germany, Netherlands, France) are perfectly compatible with the recommendations in this document.

The recommendations were drawn up with a view to

* the quality of the information obtained
* timely availability of the data
* minimizing the cost of this information
* incorporating the Eurostat project in the envisaged development of information systems (EDI: electronic data interchange).

II. Recommendations on the basic principles of a collection system

The objective of any balance of payment collection system is to provide basic information for a summary table of transactions between the residents and non-residents of an economy.

By transactions are understood all operations in goods, services, incomes, transfers and financial assets.

Any resident can carry out a transaction with a non-resident: the resident can be an individual, a company, a bank or a public administration.

Any collection system aims to obtain information from resident agents regarding their transactions with non-residents.

The basic characteristics of a balance of payments collection system must be:

- consistency of statistical sources
- exhaustive coverage of the field
- obligatory declaration
- possibility of checking
- the main headings to be provided at monthly intervals and with reasonable time-lag.

1. <u>Consistency of statistical sources</u>

To obtain high quality data it is indispensable to be consistent when collecting information from the various types of resident agents.

Information must be collected according to a single plan: every resident (whoever it may be) must furnish data on every transaction (whatever the transaction) according to a single plan (irrespective of the type of resident, the type of transaction or the direction of the credit/debit flow) in such a way that the balance data can be obtained by simple aggregation.

This does not mean that in practice the forms for obtaining the information must be strictly identical but they must contain a common body of information (e.g.: identity of the partner country, date, amount, nature of the transaction) which can be aggregated.

In practice the forms are not strictly identical: information on debit is collected by virtue of the payment order to which is added the nature of the transaction.

It must also be pointed out that basic statistics can be consistent without conforming to the balance of payments layout: the statistics can be based on settlements, which gives rise inevitably to some estimates if statistics are to be drawn up on a transaction basis (in particular to evaluate the headings "Goods" and "Transport of goods").

The system must not be based on a variety of sources of differing or incomparable reliability.

In particular the information on a type of transaction must permit comparisons of debits and credits: this can only be guarantied by virtue of the comparability of the information source (in credit and debit). Lack of comparability of debits and credits would considerably reduce the interest of the statistics (whatever the type of transaction involved and in particular for international trade in services).

2. Exhaustivity

The information collected must permit to obtain the total of credits and debits for all transactions (gross amounts without offsetting).

Above a certain threshold transactions must be subject to a declaration, mentioning in particular the nature of the transaction.

Below this threshold the basic information must permit evaluation of aggregates (credit and debit), while the breakdown according to the nature of the transaction could be made with the aid of estimates, based for example on samples. **The threshold must be sufficiently low to make this method of estimation statistically valid.**

Exhaustive collection is absolutely indispensable in order to ensure the quality of the information. If credit and debit totals are not known, the data based on them will not be reliable: the possibilities of error compensation in credit and debit are immense and the determination of the balance of payments is precarious.

It must also be pointed out that from the analysis point of view the balances are not the only information of interest: it is essential to have gross credit and debit data and to avoid further recording after compensation, etc. This is valid for all transactions and in particular for international trade in services.

It can be envisaged (cf. III.2) to use other sources for the items "Merchandise" and "short term capital". However the principle of a unique scheme is preferable.

3. Obligatory declaration

a) **Above a certain threshold there must be obligatory declaration by the resident carrying out the transaction.**

b) **Below the threshold, it is up to the banks to provide the information, but in less detailed form (without stating the nature of the transaction since this is not declared by the operator).**

4. Possibility of checking

To ensure a certain level of information quality it is essential to be able to check it. **In particular, the statistician must know the operator (identification by name and address) and if necessary be able to verify declarations or obtain information in the event of partial absence of declaration.**

5. Principal headings to be provided at monthly intervals and with reasonable time-lag

The data should be collected in such a way as to permit monthly statistics in respect of the main balance of payments headings with a reasonable time-lag (below 3 months)

III. Recommendations on the principal operational rules of a collection system

Without attempting to propose detailed rules for a collection system, it is necessary to indicate its principal characteristics suitable for compiling the balance of payments.

To reduce costs, there have been proposals to exclude certain types of transactions from the general collection system (paragraph 2). Such proposals can only be considered as possible options and not as recommendations: the general collection systems which include all transactions are undoubtedly more costly but on the other hand also more reliable. The suggestions contained in paragraph 2 are only a compromise with a view to furnishing statistics of acceptable quality at a relatively low cost.

1. Payment orders (debit)

The payment order must form the basis for the system as regards information on debit.

Indeed the cost of this information is relatively low since all the information is already contained in the payment order with the exception of the nature of the transaction. Only the description of the transaction or its coding must be added for statistical purposes, while the other indications (names of operator, amount of the transaction, date ...) are required to carry out the payment itself. Furthermore, as has already been pointed out, a specific threshold could be introduced to simplify the system, whereby estimates on the breakdown of transaction by type would be made in the case of transactions below this threshold.

Below the threshold, information should be collected without the indication of the transaction. However the valuation of the total of debits should be correct.

Thus the information obtained by the payment order is extremely important since it is then possible to record practically all debits, with the exception of operations carried out via an account with a non-resident bank or those which are subject to compensation (see **paragraph 2**). Furthermore it is probable that future payment orders will contain practically all the information required to draw up the balance of payments (in debit and **in credit**) (see Part C).

2. Information on other debits and on total credits

At present, in the absence of a system for the exchange of micro-economic information between banks, the payment order makes it possible to obtain information on almost all debits but furnishes nothing where credits are concerned. For this reason data must be collected in respect of :

a) debits carried out other than through a payment order via a resident bank: i.e payments made from an account with a non-resident bank or settlements by compensation, bill of exchange, etc.

b) all credits.

Some Member States include all transactions and have an entirely closed system: all debits and credits above a certain threshold are declared. This is preferable from the point of view of data quality.

However, correct information can be obtained without trying to include all transactions directly.

In particular

- goods statistics can be obtained through the external trade system
- short-term capital transactions can be obtained from the monthly declarations of amounts outstanding by banks and other resident agents. Declarations of amounts outstanding are far less costly than those involving the transactions (owing to the high number of transactions). Experience shows that even with a high threshold for amounts outstanding correct information on flows can be obtained.

It should be noted that if credit data on goods and short-term capital are gathered in this manner, collection costs are greatly reduced although the quality of information could be affected. In particular the checking of data could be made more difficult.

All transactions concerning "credits" and "other debits" (point a) must be declared directly, except possibly the items "merchandise" (for credits) and "short term capital" (for credits).

3. Statistics of amounts outstanding

Statistics of amounts outstanding (assets and liabilities) of all agents (banking and non-banking) can be used

- to check

  a) the total of current transactions

  b) the plausibility of the sum of income from capital

- to compute the capital transactions (by difference)

4. Information to be collected

For the settlements (cf. III.1 and III.2) the declaration must give:

- **the identity of the declaring party (name, address, company coding where necessary)**
- **the nature of the transaction and additionally its nomenclature coding**
- **the name and additionally the code of the partner country**
- **the date of the transaction**
- **the amount of the transaction**

5. Legal framework

The information must be collected within an appropriate legal framework

This framework must stipulate

a) the obligation to declare

b) confidentiality

a) Obligation to declare

To obtain all the information, the party responsible for providing this must be subject to statistical obligation. Appropriate sanctions (fines if necessary) must be provided in the event of a refusal to declare. In practice, in the case of important declarants, it is desirable that direct relations be established between the declarant and the statistical service responsible for collecting the information. In this case the information is generally transmitted periodically (for example monthly) in a pre-ordained form (for example tape). In return for this, it is desirable that the statistical service furnish specific statistical statements (tables, etc.) meeting the statistical requirements of the enterprise and which can have a significant exchange value for these important declarants.

b) Confidentiality

The declaration must include identification of the declarant (name and address). It must be possible for the statistical service to store this information. This is essential to enable this service to carry out checks where necessary and thus ensure an improved quality of information. **In return confidentiality should be legally guarantied.** This implies that individual data should only be stored on a limited period of time and in no circumstance be provided to a third party. In order to be able to "technically" guarantee this confidentiality, the storage of names and addresses on a separate file with very restricted access could be envisaged.

6. <u>The party responsible for providing information</u>

Generally speaking the party responsible for providing the information is the resident who in practice carries out the transaction with the non-resident and who knows the details relating to it. For certain types of transactions the resident banking agent serves as the intermediary. This is the case for the following transactions:

- purchase/sale of securities
- income (interest, dividends, etc.) from securities
- tourism (purchase/sale of currency and other methods of payment).

In these cases, the resident agent does not generally make the payment to the non-resident; the banks make it and thus act as an intermediary on behalf of their client. It is then the bank which must provide the information.

B. COMPARISON BETWEEN

"GENERAL DIRECT REPORTING SYSTEMS" AND "SURVEY SYSTEMS"

Comparison between the two systems is difficult because there exist different general reporting systems in practice, and similarly there is no one single survey system. In order to clarify the discussion we will first define the system from a theoretical point of view.

I. DEFINITION OF THE SYSTEMS

1. GENERAL DIRECT REPORTING SYSTEMS

- Every resident has to report above a certain threshold :
    - Main operators have to report all their transactions (even below the threshold)
    - Other operators have to report only their transactions above a certain threshold
- The report form includes all transactions
- The information concerning the total credit and debit is available for the central bank. Below the threshold the total amount of transactions is known as well as its geographical breakdown and the identy of the transactor. The Central bank has only to make estimates for the breakdown according to the purpose of the transactions.

2. SURVEY SYSTEMS

- Only the most important transactors are requested to report. Their names are usually kept on a list.
- The report form does not include all transactions. Operators are requested to report only on the transactions related to their main activity. For example, transport enterprises should report only for transport services they have exported but not on capital transactions or services/goods imported.
- Consequently information concerning total credits and debits is not available for the compiling economy.

II. COMPARISON OF THE DIRECT REPORTING SYSTEM AND THE SURVEYS SYSTEM

1. For the **main operators** the comparison of the information coming from both systems is the following :

- concerning the main activity of the operator the result is the same : both systems give an identical information
- concerning other transactions only the general reporting system provides information.

For example, concerning "transport enterprises" both systems provide information on the export of transport services but only the general direct reporting system gives information on the other transactions of transport enterprises (e.g. capital transaction) because the purpose of the survey is only to provide information on transport.

2. It is impossible in principle to miss any important transactor with general reporting systems because all the transactors are identified alongwith the total amounts of their transactions. With surveys, there is always the possibility of an incomplete "list".

3. With "general reporting systems", the transactions of less important operators are reported and the breakdown of transactions below the threshold according to their nature can be estimated using a simple percentage rule. However, it has to be stressed that the quality of information is probably worse than in the case of the main operators.

4. There is not a strict statistical comparability between credit and debits within a survey system. Statistical comparability between credit and debits is better with a general direct reporting system.

   Let's take a theoretical example (advertising service) : Let us suppose that in a country, only three enterprises export advertising services and about 40 big companies, engaged in international transport (or merchandise export), import advertising services. It is likely that export of advertising services will be well recorded in both systems. However, the import of services will not be recorded in the survey systems because enterprises are requested to report only for their transport activities (or international trade statistics are used for merchandise). Import of services will be recorded with general direct reporting systems because the 40 big enterprises will be asked to declare all their transactions including imports of advertising services.

   Even if we modify the example slightly and suppose that the import of advertising services is made not only by 40 big enterprises but also by 100 middle size enterprises, the import will be recorded by the direct reporting system if the amount is above the threshold.

5. Two other advantages of the direct reporting system are :

   - the availability of the geographical breakdown
   - the monthly periodicity of the information.

From a theoretical point of view, it is not impossible to obtain information with a geographical breakdown on a monthly basis through a survey system. In practice, however, it is rarely done because of the costs involved.

6. Evaluation of costs.

In order to make comparisons, Eurostat requested experts of direct reporting systems (France, Germany, Netherlands) and of a system based on specific surveys (United Kingdom) to furnish basic data. Eurostat's conclusions are as follows:

a) Although the figures should only be considered as approximate, it appears that the number of persons involved in collecting, processing and checking is 260-310 in France (direct reporting system) and around 200 in the United Kingdom (system based on surveys).

b) The direct reporting system can be made "lighter" (cf. III.2) by not collecting information on merchandise (credit) and short term capital (credit). This is the case with the Deutsche Bundesbank system.

However, this kind of comparison has to be analysed with caution :

- costs incurred by the enterprises are difficult to measure;
- regarding the survey system, costs depend crucially on the complexity of surveys (for example, in the case of UK the International passenger survey is very costly but gives detailed information).

C. ELECTRONIC DATA INTERCHANGE

EDI is the electronic transfer from one computer to another of commercial or administrative data, using an agreed standard message structure. Under the auspices of the United Nations work has been carried out by the UN/EDIFACT (Electronic Data Interchange for Administration Commerce and Transport). Where balance of payments is concerned, two working groups of the UN/EDIFACT are of particular interest:

- the MD6 group which aims to promote the exchange of statistical information. This group includes four working groups with the following fields of activity:
  * exchange of information between statistics institutes
  * relations with other groups on statistical issues
  * coding, classification, dissemination
  * collection of raw data.

- The MD4B group which has the responsibility to define the financial messages.

The basic idea is that the MD6 group should ask for a modification of the financial message in order to obtain the appropriate information for the balance of payments. Financial messages (as envisaged within the MD4B group) already contain very useful information for balance of payments. Some additional information would have to be indicated in order to provide all the elements necessary for compiling the statistics (in particular the information on the "nature of the transaction" : verbal description and codification).

At present transactors have to give supplementary information to the bank or directly to the Central Bank each time they make an ordinary (non electronic) payment order.[1]

The difference will be that the whole information will be contained in the electronic financial message. This implies that the information will be transmitted from the payor's bank to the payee's bank. In the long run, if the codification of the transaction is harmonized, this will imply that this information could be used to draw up the statistics of the payee without the payee's bank asking the payee for any information.

The payment order could give (in this way) information not only for expenditure but also for receipts (by using the payment order made by non-resident). Broadly speaking, this means that the cost would be divided by two.

The cost reduction will affect both the banks and their clients : the payee's bank will not have to ask the payee for additional information but only to send the payor's financial message to the Central Bank because this message will already contain the appropriate information.

However, it should be stressed that this "ideal" situation can only be realized in the long run. At present there is no harmonization of the codification of transactions between countries and harmonization will take time.

EC Member States having a direct reporting system are in favour of the development of the EDI system.

The system will run at the beginning with the present national codification for transactions, as it is now.

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1 In order to simplify the document, reference has been made to the payment order (the so-called PAYORD in the EDI system). However, for sake of completeness it should be said that all the financial messages would have to be taken into account within the balance of payments data collection systems (i.e. Payord, Payext, Paymul, Dirdeb, Credadv, Creext,...)

One advantage of the electronic message system will be to provide the information in a very timely way. Even at the beginning (with national codifications), the Central Bank could, when the payee account is credited, use the payment order of the payor (non resident) and translate the codification of the payor's country into their own codifications.

Electronic financial messages will probably not completely replace ordinary messages. The present system based on ordinary messages complemented by a comprehensive statistical declaration of the main operators (for all their transactions) will continue, together with electronic messages, in a completely coherent way (as it is at present). However, the development of electronic messages will lead to important improvements in the data collection system in terms of cost and timeliness. In the future, with harmonization of codification, this should lead to better harmonization of statistics with fewer bilateral asymmetries, which are at present very important.

The low cost of data collection through the EDI system (together with direct reporting of the main operators) could even persuade countries with survey systems to shift towards direct reporting systems.